

# **college** **AND UNIVERSITY** **business**

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**JULY 1958**

*Redbrick and Ivory Tower*

*Operating Policies for Bookstores*

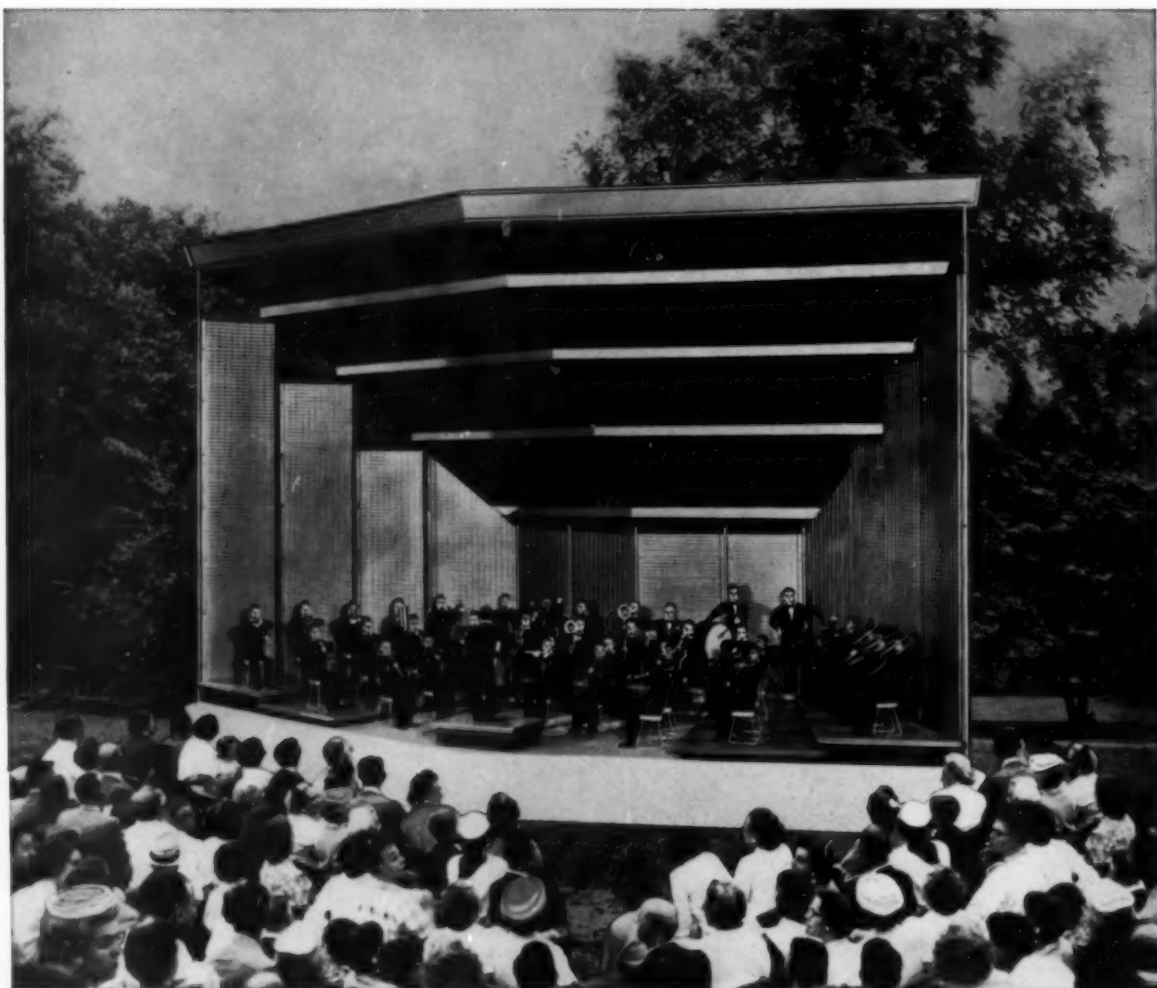
*University Fund Development Comes of Age*

*Office Machines: to Lease or to Own?*

*Catering for Special Events*



GRADUATE STUDENT APARTMENTS, CLAREMONT COLLEGE, CLAREMONT, CALIF. (page 28)



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AMONG THE AUTHORS: Terence W. Denley, manager of staff services at Stanford University in California, has recently completed a careful and exhaustive study of the comparative costs of renting or owning machine equipment for the business office. His analysis of the comparative costs in leasing or owning office machine equipment deals particularly with statistical and tabulating machines. . . . Al Zavelle, director of campus stores for New York University, recently completed an analysis for the University of Puerto Rico in regard to operating a university owned bookstore. The principles outlined in his survey report should help college administrators evaluate their own bookstore operation. Mr. Zavelle was responsible for the establishment and operation of the Associated Students Bookstore for the University of New Mexico. N.Y.U. has five bookstores on its five New York campuses. . . . Elsie dePonte, director of dormitories and food service at DePauw University, long has felt that proper utilization of student personnel is the answer to food service scheduling for special events. Her recommendations should be helpful to food service directors.

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## QUESTIONS AND ANSWERS

### Effects of Automation

Question: What effect will automation have in the future planning of college kitchens and dining halls?—T.B., Tex.

ANSWER: In my judgment, increased automation will have the following results:

1. The initial investment for equipment will be more expensive. The new equipment will require better training of employees both to operate it and to avoid costly repairs brought about by negligence or improper use. Thus, although there may well be fewer employees required to perform in a specific area, their rates of pay will be proportionately higher.

2. The increased trend toward the use of preportioned, processed and ready-to-use foods will tend to require less kitchen space and equipment. Automation plays a part here. Manufacturers, by using such equipment, will do a better job at a correspondingly lower price, thus offering added incentive to the dining room operator to purchase these products.

3. As vending machines become more versatile and efficient and offer a wider variety of foods, this type of service will become more of a part of the food service operation. Particularly will this be true during off hours and on week ends; possibly, machine vended items will be used to supplement regular meal service. This, too, should reduce the amount of kitchen equipment required.

4. As to dining room space, automation as such is not a factor. The only possibility lies in speedier service because of automatic equipment, thereby increasing turnover and, thus, requiring fewer seats to provide service for the same number of people. I feel that there is little hope in this direction, nor is it necessarily a wise

objective because of the social and educational values to be obtained from students eating together in as leisurely a fashion as present customs permit.—JOSEPH P. NYE, *director of university residence halls, Columbia University.*

### Internal Auditor

Question: How general is the practice of maintaining the services of an internal auditor? To whom should this person report?—A.W., Ky.

ANSWER: Historically, as the college and university grew in size and complexity, and as the number of financial activities conducted outside the business office increased, there has been a trend toward the establishment of internal audit sections as part of the business office organization. Today, in most large colleges and universities, there is an internal auditing staff whose function is to maintain a continuous audit on the operations of the business office and on all outlying departments conducting affairs of a business nature. Regular audit programs, similar to those used by independent accountants, are established and followed.

The internal auditor is responsible directly to the chief business officer and is as independent as possible of other institutional business officials. The internal audit function thus becomes a verification of the financial activities of all university personnel except the chief business officer. The activities of the latter officer, of course, are subject to verification by the independent audit, conducted usually on an annual basis and normally addressed to the governing board.

Internal auditing is equally important and necessary in small colleges that cannot utilize a full-time auditing department or even a full-time internal auditor. In these cases, some staff member from time to time assumes the rôle of internal auditor by conducting an independent check on the work of his associates and on the fiscal operations of outlying departments. Internal auditing is a necessary complement to any well organized institutional business office.—CLARENCE SCHEPS, *controller, Tulane University.*

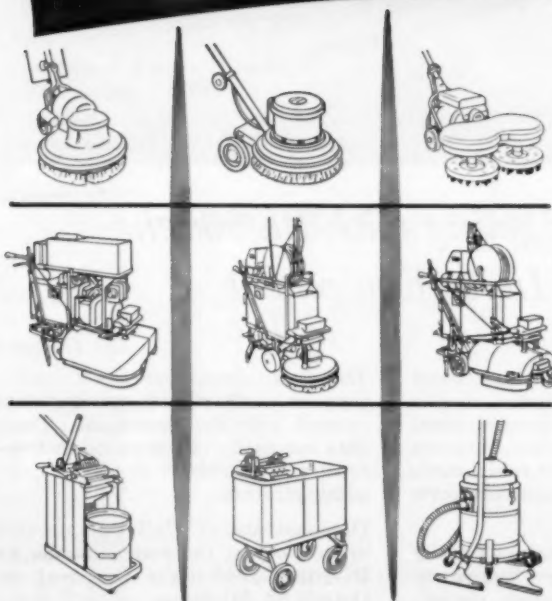
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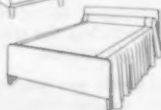
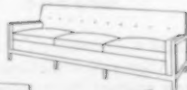
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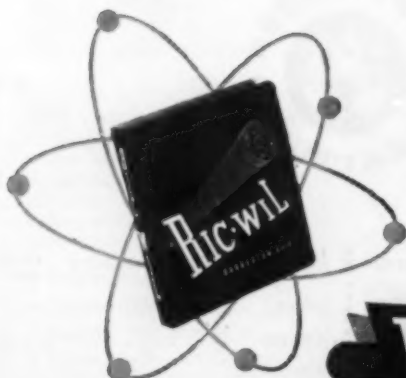
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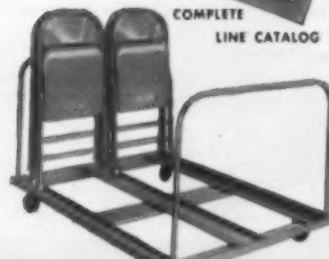


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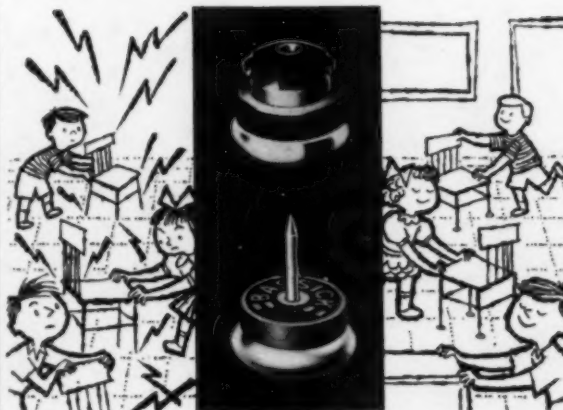
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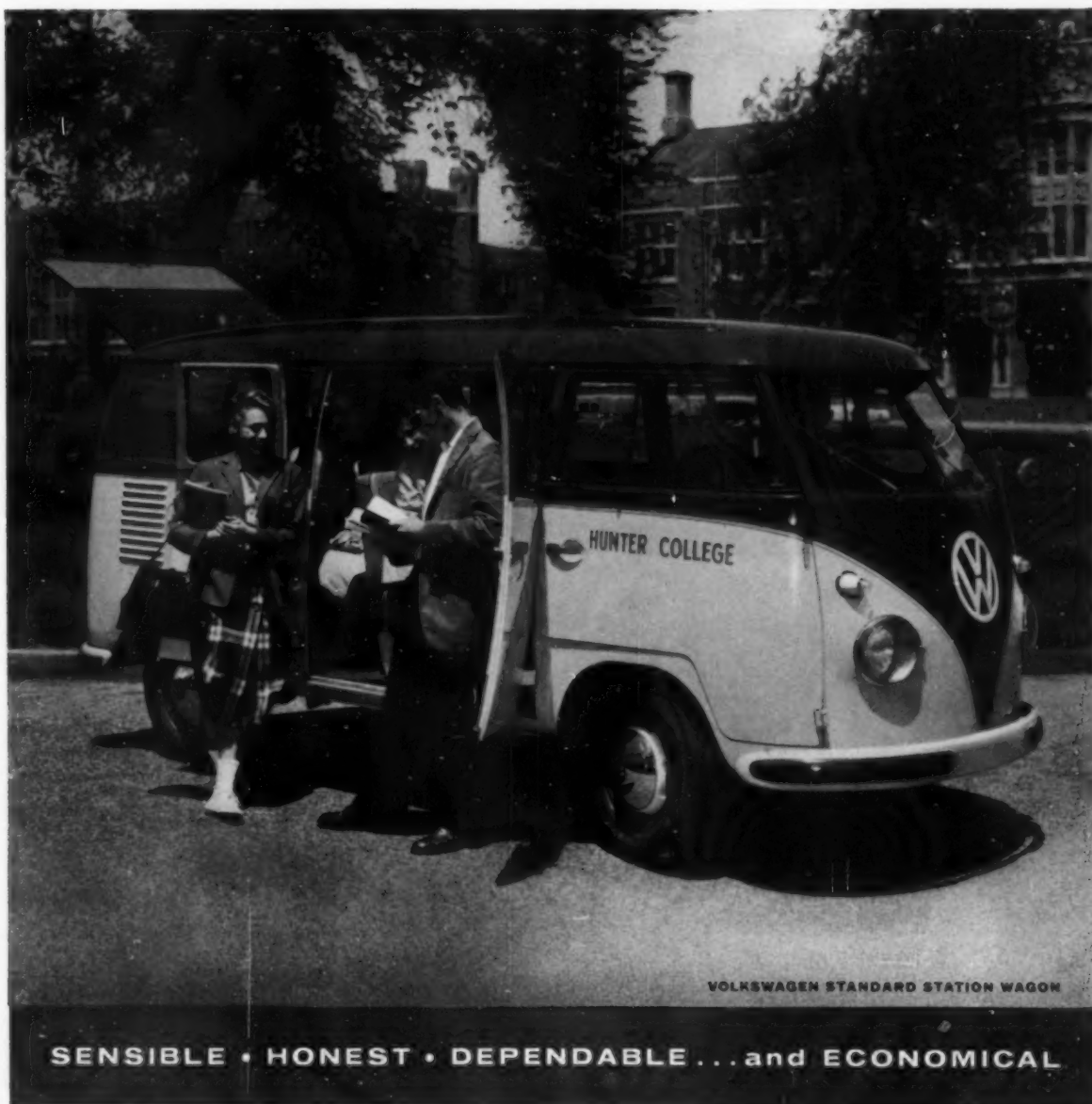
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The tumbler  
is Columbian,  
No. 1810, 9-oz.



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Gentlemen:  
The Hi Life Restaurant has enjoyed a reputation for exacting food service and specialty dishes in the unique surroundings of the bar and dining room. Travelers regard the Hi Life as a "must," and we have had the pleasure of serving political and sports celebrities on a regular basis.  
Sometime ago we remodeled and in selecting our new china, silver, and glassware service, we chose Libbey Crested Ware for its distinctive styling and utility of service. We have had many favorable comments from our guests about the Libbey Crested beverage and hiball tumblers used in both the dining room and bar.  
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But the tragic fact, our doctors tell us, is that every third cancer death is a needless death...*twice* as many could be saved.

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For a list of those life-saving warning signals and other facts of *life* about cancer, call the American Cancer Society office nearest you or simply write to "Cancer" in care of your local Post Office.

**American Cancer Society**

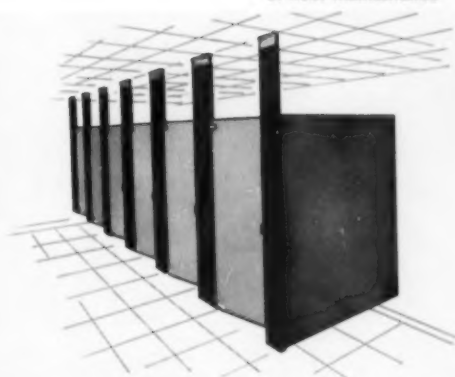


# "WEIS WAS WISER!"

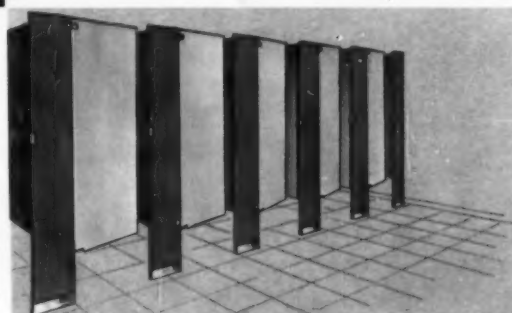


Architects, building owners and tenants become fully aware of WEIS toilet compartment advantages the second or third year after installation. That's when their original choice is confirmed, when they can say with firm conviction, "Our choice of WEIS was wiser!"

Ceiling-hung design is the ultimate for ease of floor maintenance



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WEIS Vitre-Steel toilet compartments are available in a wide choice of colors to harmonize with any decorating plan. Finished inside and out in vitreous porcelain enamel (fired, not baked), Weis compartments are not subject to breakage and staining. Nor do they present costly installation problems.

Available in both floor-braced and ceiling-hung designs. See Sweet's Architectural File, No. 22b/We—or write for complete information.

**Henry Weis Manufacturing Company, Dept. H-1807, Elkhart, Indiana**

Weis Vitre-Steel compartments have been selected for prominent buildings designed by the following architects: Bastille Halsey Assoc., Boston, Massachusetts; Perkins & Will,

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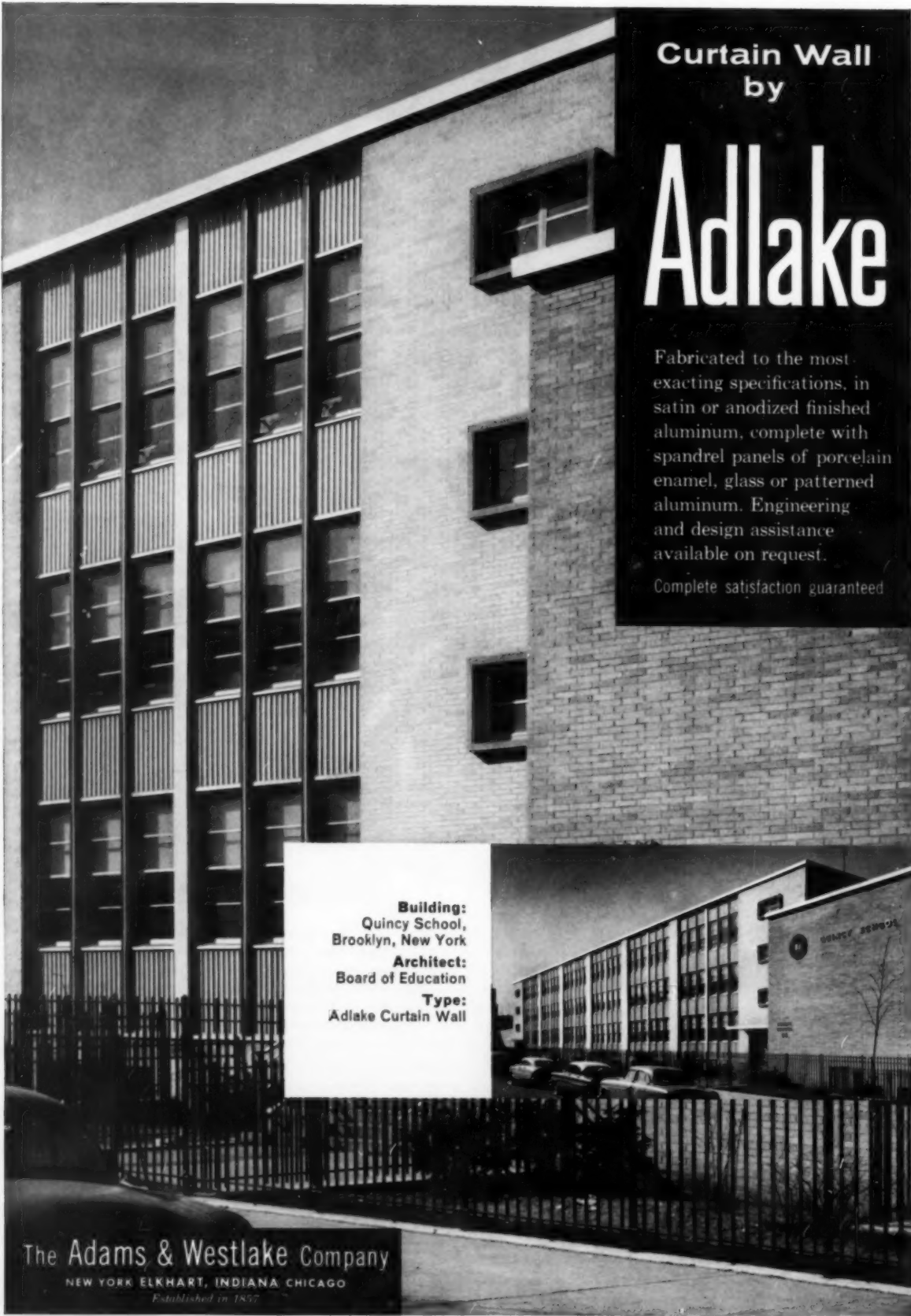
John E. Ramsay, Jr., Salisbury, North Carolina;

Robert E. Alexander, Jr., & Assoc., Dallas, Texas; Richer & Axt,

West New York, New Jersey; C. E. Silling & Assoc., Charleston,

W. Virginia; Raymond Harry Ervin, Denver, Colorado.





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Complete satisfaction guaranteed

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**Architect:**  
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**Type:**  
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NEW YORK ELKHART, INDIANA CHICAGO

Established in 1897



## *You Can Keep Them by Keeping Them Happy*

**W. W. LUDEMAN**

*President, Southern State Teachers College, Springfield, S.D.*



COLLEGE PRESIDENTS AND CONTROL BOARDS ARE CONSTANTLY trying to build up faculty contentment. To approach the problem more factually we carried on the study reported here. A check list of 20 factors in faculty contentment was sent to 20 colleges, eight private and 12 public, in South Dakota, North Dakota, Iowa and Nebraska. Staff members were asked to rate the top five factors, in order of importance, and to add other factors significant to them.

Tabulation of several hundred returns brought the following ranked list of factors that best keep faculty members most contented.

- |  |   |
|--|---|
| 1. Adequate salary                           | 12. Sabbatical leaves available                         |
| 2. Academic freedom                          | 13. Opportunity for research                            |
| 3. Sensible teaching load                    | 14. Location in cultured community                      |
| 4. Strong administration                     | 15. Opportunities to attend state and national meetings |
| 5. Adequate physical facilities              | 16. Good public schools for faculty children            |
| 6. Interdepartmental cooperation             | 17. Ample vacation time                                 |
| 7. Well defined college objectives           | 18. Community is well churched                          |
| 8. High student scholastic attitudes         | 19. Effective program of student activities             |
| 9. Strong faculty scholastic level           | 20. Opportunities for committee assignments             |
| 10. Adequate library facilities              |   |
| 11. Adequate retirement and health insurance |   |

Factors written in by a few staff members were: adequate housing, friendly community, democratic policies in administrative and faculty and student relationships, departmental autonomy, adequate sick leave, sense of security, tenure plan, careful class scheduling, intradepartmental cooperation, recognition of training and merit.

The tally was taken separately for private and public colleges. There were only minor variations in the rankings. Adequate salary was first in both types of institutions, and academic freedom was second, but sensible teaching load was fourth in private colleges and third in public. Strong administration rated third at private colleges but fourth at public colleges. Adequate physical facilities was rated ninth at private but fifth at public institutions. The ranked check list gives a studied set of factors on which the administration of any college needs to be alert.

We were interested in reasons given for rating certain factors first on the list, especially academic freedom. Here are a few of the reasons given for placing it high on the list:

"Without academic freedom all other factors become meaningless," "academic freedom is basic to successful instruction," "the good teacher must have the necessary academic freedom to be completely accurate," "academic freedom provides self-expression, creativity and satisfaction," "good teaching requires freedom to present subject matter in an honest and truthful way," "the freedom of a responsible person is his most cherished right," "academic freedom means interpretation of material but does not mean license to propagandize."

Faculty members were asked to list the biggest gripe heard from fellow staff members. Some of the more significant gripes were: "favoritism on part of administration," "no opportunity for expression of ideas," "no time for leisure activities," "overloaded with clerical duties," "must work at athletic games," "forced to pay for activity tickets and donate to many things," "low academic quality of students," "inconsistencies in administrative policies," "always tearing up physical plant and never finishing anything," "lack of secretarial help," "must park auto in mudhole and walk through it to class," "insufficient office space," "lack of tenure," "impersonal indifference to faculty morale," "I do three times as much work as so-and-so," "faculty not consulted on far-reaching changes in policy," "no pats-on-the-back from the administration," "policies change without explanation or reason," "too many extras added to regular teaching duties."

From this study it appears that complete college faculty contentment would call for superhuman administration. However, by more careful attention to salaries, teaching loads, freedom of expression, plant facilities, cooperation in policy making, and certain other items we could come quite close to the ideal. In this day of competitive bidding for personnel between colleges and industry, more attention must be given to all factors that build morale, or the colleges will fail to attract and hold the staff members who will be needed to handle the spiraling enrollments.

# LOOKING FORWARD

## **Kudos for Lake Forest**

THE DRAMATIC ANNOUNCEMENT BY PRESIDENT ERNEST A. JOHNSON OF LAKE FOREST COLLEGE, LAKE FOREST, ILL., THAT FACULTY SALARIES WOULD BE INCREASED 24 PER CENT DESERVES MORE THAN PASSING COMMENT.

Many college executives have talked about the quality offerings of the small liberal arts college but often there is a wide gap between propaganda and performance.

President Johnson is on safe ground when he states that a great college is built on a great faculty. To implement this belief Lake Forest College in the last four years has increased salaries approximately 65 per cent. Administrators at the college recognize the fact that the present faculty shortage will become more competitive and critical in the immediate future and propose through their new faculty salary program to be in a favorable position to obtain the top-flight faculty they desire.

In commenting on the matter of college finances, President Johnson asserted: "In college financing there exists little choice in spending limited funds. You can place emphasis upon spending on 'people' or on 'bricks and mortar.' Lake Forest has made its commitment to the former."

It is a commendable choice.

## **An Even Dozen**

EXCITING THINGS HAVE BEEN TAKING PLACE IN HIGHER education during the last 12 years. Overflow enrollments, tremendous building programs, the appearance of married students as an apparently permanent phenomenon on the college campus, the professionalization of college business administration, the advent of instructional television—all these have taken place in the relatively short period of time that COLLEGE AND UNIVERSITY BUSINESS has been a part of the higher education scene, since its initial issue in July 1946.

It's been an exciting time for COLLEGE AND UNIVERSITY BUSINESS, too. The editors covet the continuing privilege of serving the field of higher education in this dynamic era.

## **A Matter of Principle**

HIGHER EDUCATION NEEDS FUNDS DESPERATELY THESE days, so it is news when a college or university rejects a gift considered inconsistent with the objectives of the college.

In recent weeks, Brandeis University turned down gifts totaling \$225,000 on the ground that they would be contrary to the institution's nonsectarian policy. One rejected gift was a bequest of \$125,000 in the will

of a Chicago woman. It was intended to provide an endowment income of \$5000 to \$6200 annually for worthy students of the Jewish faith.

The other was a proposal by a Roman Catholic widow of a Jewish man who had made modest contributions to the university. She had offered to put into her will a legacy of \$100,000 for scholarships for Catholics at Brandeis. After the offer was rejected, the woman agreed to change the legacy to make it available to all who could qualify.

This consistency as a matter of principle merits commendation. Brandeis University, founded 10 years ago under Jewish sponsorship, has faithfully held itself to its nonsectarian policy. One of its earliest groups of buildings included three separate chapels for members of the Hebrew, Protestant and Roman Catholic faiths.

Most colleges have been in operation for a longer period of time than Brandeis. Few have achieved a higher standard of ethical performance.

## **Ten Years From Now?**

HOW MANY COLLEGE PRESIDENTS AND BOARDS OF TRUSTEES have any idea where their colleges should be 10 years from now?

Nobody can accurately predict the future, but at least it's not out of order to plan intelligently for it. It's been encouraging to note that, with increasing frequency, institutions in many areas are now reported to be engaged in critical self-analysis as to curriculum standards and content, space utilization, and faculty.

Perhaps more could be done in analyzing the student constituency and in detecting sociological trends and the economic climate in which the institution operates. How receptive is policy personnel to considering new and better ways of doing things in the area of instructional technics, plant operation and maintenance, business management, and personnel administration? Colleges and universities are engaged in challenging programs of research for government and industry, but how effective is higher education's research in behalf of itself?

College administrators should not wait for tomorrow to present problems for which no preparation has been made. Aggressive steps in preparing for the future should be taken now, not 10 years from now. As one wag phrased it, "Footprints on the sands of time are not made by sitting down." Laziness and indifference are not likely to make much contribution to the future improvement of higher education administration.

LAST YEAR I VISITED MORE THAN HALF the universities in India, Pakistan, the Union of South Africa, Great Britain, Australia and New Zealand. I talked with chancellors, vice chancellors, rectors, deans, professors and students. Though the few months spent in the effort to get an over-all view of higher education in these areas were perhaps not sufficient to understand fully the genius of even one of them, they did leave some general impressions worth reporting.

As it will not be possible to do more than consider a limited area of university life, perhaps it would be appropriate to deal with the influence of modern developments on the older conception of university policy and practice. I have therefore chosen as my topic: "Redbrick and the Ivory Tower."

Bruce Truscot, in his delightful and witty "Red Brick University," which appeared in 1940, made a plea for the modern provincial universities, contrasting their possibilities with those of "Oxbridge," a synthetic name for the ancient universities of Great Britain.

Either his plea was highly effective or else it was startlingly well timed, for since that book appeared the place of the urban universities of Great Britain has been transformed. The support he urged for them has been forthcoming and their rôle in the higher education program of the United Kingdom has expanded incredibly. Perhaps the only way to convey the full meaning of that statement would be to give some background of higher education in Britain with special reference to what has happened in the last decade.

First of all, for more than 600 years, England had only two universities, Oxford founded in 1167 and Cambridge in 1209. Though Scotland, with a smaller population, established three universities in the Fifteenth Century and a fourth in the Sixteenth, England had only two until the second quarter of the Nineteenth Century. Indeed, until the beginning of the Twentieth Century "Oxbridge" may be said to have provided virtually the only university leadership in England.

London was only an examining body before 1900. While Durham and Manchester at the turn of the

## Redbrick or Ivory Tower

A visit to the universities, ancient  
and modern, of the United Kingdom

OLIVER C. CARMICHAEL

Educational Consultant, Fund for the Advancement of Education

century had been degree granting institutions for some decades, the number of students was small and the leadership they exercised was, up to that time, negligible. Those three were the only universities in England except for Oxford and Cambridge.

Several university colleges were operating before 1900, but they did not confer degrees. Others were established early in the present century and all of them now, save one, have been elevated to the status of universities. The North Staffordshire College established in 1949 is the only university college now in England, and it has degree granting powers.

### ENGLAND HAS 18 UNIVERSITIES

When Truscot published his book in 1940 there were 13 universities in England; now the figure is 18. Thus the increase in the number of Redbrick universities suggests the popularity of these institutions. The fact that support from the treasury through the university grants committee has more than trebled in the same period is additional evidence of their expanding rôle. Finally, the enrollment, already doubled since 1940, has prospects for continued increase in the years ahead. For example, one institution visited had 700-odd students in 1940, 2300 in 1957, and had promised the government to double its 1957 figure by 1962.

Thus, whether one looks at the number of institutions, the increase in student enrollments, or the propor-

tionate growth of British Treasury support, as compared with the ancient universities, there is clear evidence of the growing importance of these institutions. In 1940 the following made up the list of Redbrick universities: Durham, Manchester, Leeds, Sheffield, Liverpool, Reading, Exeter, Birmingham and Bristol. To these have been added in the past decade: Hull, Southampton, Nottingham, Leicester and North Staffordshire College. Each of these, except one, bears the name of the city in which it is located.

The University of London itself began as a municipal institution and still has that status, though its influence and service extend into many parts of the commonwealth. Its enrollment constitutes 23 per cent of the total university population in the United Kingdom, not counting some 24,000 external students. The aggregate of all students enrolled in the provincial institutions, including the University of London, constitutes more than 80 per cent of the total university population. Thus, in 50 years, the proportion of university students in "Oxbridge" and the newer institutions has been reversed, and 50 years is a short time in the life of institutions more than seven centuries old.

Perhaps this in itself would suffice to indicate the trend of higher education in Great Britain, but this is not the whole story. "Oxbridge" itself is showing signs of concern for what

From an address given at the 43d annual meeting of the Association of Urban Universities.



is going on in the marketplace. Cambridge has one of the handsomest engineering buildings, and one of the best equipped.

At Oxford, for some years, the so-called "Modern Greats" course, designed to fit men for posts in business, industry and government, has flourished. Within the last decade the oldest of Anglo-Saxon universities has been increasing substantially the number of admissions of science students. Its desire to do its part in meeting national needs has prompted this institution to expand materially its facilities for scientific and technological instruction. Its medical school program provides for clinical courses which, until recently, had been considered inappropriate.

#### SIGNIFICANT CHANGES

Whether it be the newer programs of the civic universities or the national need, or a combination of the two, that has influenced the ancient universities, it is clear that significant changes are taking place in the instructional programs of these institutions. Because of the continued emphasis on science and technology that the government seems certain to insist upon, it is difficult to predict the outcome in the next 10 to 20 years. While there is no doubt about increased support for scientific and technological studies over the next five years, since plans for the quinquennium have already been approved, it is not clear how long the trend may continue. In some quarters, at least, there is considerable apprehension lest the momentum already attained may alter university education in some rather fundamental aspects.

The extent to which the trend has already developed may be indicated by an examination of the enrollments in the various schools, or "faculties," as the British call them. Traditionally the arts faculty, as we know, enrolled the bulk of undergraduates. To be sure, science subjects were included in the arts program, but the method of handling these subjects in the honors courses provided both the historical and philosophical approach, thus developing a broad background of general knowledge, though a single science such as chemistry or physics might be the subject.

While this type of program is still provided by arts faculties in many institutions, in others separate science

faculties have been inaugurated, as well as faculties of applied science and engineering. Likewise, medical schools that admit students directly from the secondary school provide only scientific and professional courses.

In 1956 the arts faculties in the universities of England, exclusive of Oxford and Cambridge, enrolled 16,947 students, while science, applied science, engineering and medicine had enrollments aggregating 32,163 students. Thus the ratio of arts students to those in science fields was approximately one to two. This does not include large numbers enrolled in agriculture, architecture, commerce and other faculties. This represents far-reaching changes in university programs when compared with those prevailing before World War II.

These figures apply to the year 1956-57. Plans for the quinquennium, 1957-62, call for a substantial increase in the number of science and technology students, in accordance with plans developed by the university grants committee in cooperation with university administrations. These plans call for an increase of 40 per cent in the student body during the quinquennium, 80 per cent of whom will be in scientific and technological fields.

#### COMMITTEE IS POWERFUL

This, incidentally, is an interesting sidelight on the way in which the university grants committee, which has been growing in importance through the years, can influence the programs of universities. The autonomy of the universities is not directly affected, since the committee works closely with the universities in developing plans. The power of the committee is obvious, however, when one realizes that approximately 70 per cent of all operational funds in the universities of the United Kingdom come from the committee.

In order to meet the increase in number of students, the grants committee has agreed substantially to increase the annual grants in support of the institutions. For example, the aggregate of grants for operation in 1957-58 is approximately 30 million pounds. This will be increased annually until by 1962-63 the grants for yearly support will be approximately 39 million pounds.

Not only is there marked increase in operational funds, most of which

is in support of scientific and technological education, but also additional funds are set aside for capital improvements. For instance, the sum allocated for buildings and equipment in the science and technology fields for the quinquennium aggregates approximately 75 million pounds, this amount to come from the Treasury through the university grants committee.

#### MILLIONS FOR TECHNICAL COLLEGES

In addition to that, the Ministry of Education has earmarked 72 million pounds for capital improvements in the technical colleges, eight of which have been selected for special support to be developed into colleges of advanced technology. Diplomas from these colleges will be, presumably, on a par with university degrees in technological fields. Therefore, though these institutions are not theoretically a part of the university system, they are performing the tasks that in other countries are performed by universities.

The emphasis on science and technology in Great Britain finds its counterpart in other countries of the British Commonwealth. In India, for example, the university grants committee announced last year that it had set aside Rs. 500 million for buildings and equipment to strengthen the scientific and technological phase of university education. This is equivalent to more than \$100 million under the present rate of exchange. It is a large sum in any land, but in a country with India's economic background it is an amazing amount, especially when you consider the purchasing power of the rupee, and the fact that the sum is for one phase of education only.

While the scientific and technological emphasis is not so marked in South Africa, Australia and Canada as in Great Britain and India, it is in evidence there, too, in plans for the future and in the funds set aside for both capital improvement and annual operations.

These, then, are some impressions, in a single area of higher education, that were derived from a unique and unforgettable experience. The meaning for higher education of this tremendous emphasis upon science and technology, which were scarcely accepted as worthy of university recognition in Great Britain until recently, is food for thought. #



# Office Equipment: When to Purchase When to Rent

**T. W. DENLEY**

*Manager of Staff Services, Stanford University, Stanford, Calif.*

EARLY IN 1956, INTERNATIONAL BUSINESS Machines Corporation consented to the entry of a judgment in the anti-trust action instituted by the Department of Justice. It offered for sale, during the period Jan. 1, 1957, through July 25, 1958, equipment previously installed or installed during the period. That's when our problems began.

We at Stanford University have a relatively large tabulating installation. The thought of providing the controller with a detailed, financial analysis of each piece of our present equipment, and for all future acquisitions, was staggering. Consequently, we delayed as long as we could while examining every possible avenue for a simple solution to the buy-or-rent problem.

Our research convinced us of three things.

First, the decision to acquire each item of equipment constitutes a separate problem. It is highly unlikely that any company should decide to rent all its equipment or buy all its equipment. Certain factors are common to large groups of equipment, and some factors may be common to all equipment; but all factors are not common to all equipment. Press reports and magazine articles that advocate or oppose leasing everything are misleading; this is not a problem that can be solved by a blanket rule.

Second, our problem shouldn't be confined just to IBM equipment. A key punch and an electrical adding machine have much in common. Both are electromechanical devices. Both are subject to obsolescence. Both require maintenance of a type the operator can't ordinarily perform. Both are available to buy or to rent.

From a paper presented before the Western Association of College and University Business Officers, Carmel, Calif.

With so many similarities, the fact that most of us will, without giving any thought to the matter, rent a key punch, and will just as often, and with as little thought, buy an adding machine, simply illustrates that we are creatures of habit and tradition. Judgment should be used to replace tradition in deciding whether office equipment in general should be purchased outright or rented.

Third, the full, financial analysis of a piece of equipment may be necessary to present your conclusions to buy to management or to the board of trustees or regents, but it certainly isn't necessary to determine which piece of equipment should be purchased and which piece of equipment should be rented. In fact, we have developed a worksheet that enables us to make this decision in five minutes for any piece of equipment.

## **BUYING vs. RENTING**

Our worksheet was developed by looking at the problem as one involving a possible investment in fixed assets. Any investment requires a commitment of funds now with the expectation of earning a satisfactory return on these funds over a period of time in the future. The return that we receive by buying equipment rather than renting it arises from an avoidance, or savings, of a series of rental payments. If in the aggregate this stream of savings looks large enough, the investment in the equipment is worth while; if it is not large enough, then funds should not be tied up in such an investment, and equipment should be rented.

The reason we prefer to lay out a dollar some time in the future rather than to lay out that same dollar today is that, if we can defer the payment, the money can be used in the interim to earn still more money.

It is better to neglect temporarily most of the cost elements that may actually be relevant and to focus on the two major items: the purchase price, if the machine is bought, and the monthly rental payments, if the machine is rented. Let us assume, for example, that the problem is to decide what action should be taken on a particular item of equipment that can be purchased for \$1000 or rented for \$200 a year, payable at the end of the year. Suppose, too, that we know that the equipment will have a useful life of five years. In this case, we appear to be comparing the alternatives of buying for \$1000 or renting for a total of \$1000. But, appearances are deceiving.

The first \$200 annual payment is not due until the end of the year and, at the 4 per cent yearly earnings rate, only \$192 would be necessary today to make the first payment. The second annual payment, due two years in the future, would require only \$185 today to make the payment. The third annual payment would require \$178 today, the fourth payment \$171 today, and the fifth payment would require only \$164 today. The aggregate present value of these five payments is \$890. Since this figure takes into account the time at which the payments are made, thus bringing all these payments to a common moment in time, the present, it is a figure that can be compared directly with the thousand dollars which we would have to pay for the equipment now if we purchase it.

When making such a direct comparison, we are in effect reasoning as follows: If we purchase the machine, the cost is \$1000. If we rent the machine for five years, the present value of these five rental payments is only \$890. Therefore, we are better off to rent the machine. By reducing the

stream of rental payments to their present value, we find a figure that is directly comparable with the purchase price, since the purchase price is already stated in terms of its present value.

To those who have worked with the present value concept before, this point will be obvious, but if the concept is not familiar to you, you may find it difficult to accept the notion that a company is better off to pay out \$1000 in rent over five years than to pay out \$1000 cash today. Look at it another way. Set aside \$890 now, invest it at 4 per cent interest and you will be accumulating enough interest so that you will have the cash to pay \$200 rental at the end of each year for five years.

If you are still not convinced, it is important that you test this concept for yourself. Try other problems with the figures given in the back of your Accountants' Handbook under "Present Worth of \$1 at Compound Interest." The whole foundation of a correct analysis of the buy-or-rent problem rests on the concept of present value.

Even though the detailed figures may seem a little strange at the beginning, everyone will recognize that a dollar on hand right now is worth more than the promise of getting a dollar some time in the future.

#### WHAT TO CONSIDER

The figures that need to be considered on our worksheet can be grouped into three categories: (1) cost considerations involved in purchase and in rental, respectively, (2) the earnings required to make an investment attractive, (3) the estimated use of the life of the machine. Each element of cost will be discussed briefly. However, the two important characteristics of costs that are essential in the buy-or-rent problem are these: (1) They are future costs, i.e. they are estimates of what costs will be incurred in the future. Costs already incurred as of the time the decision is made, such as the cost of investigation and systems design, can be disregarded. (2) They are differential costs, i.e. they are costs that will be different if the machine is purchased from what they will be if it is rented.

Since our concept involves a comparison of the cash outlay over the useful life of the equipment for the alternatives of rental or ownership, the individual items resulting in these

cash flows can be categorized either as (a) one-time costs, representing cash outlays that occur just once during the life of the proposal, or as (b) periodic costs, representing a continuing flow over the life of the proposal.

#### EXAMPLES OF ONE-TIME COSTS

Examples of the one-time costs are: purchase price, purchase excise taxes, purchase sales taxes, transportation in, costs of installation, initial cost of training operators, and salvage value. Examples of the periodic costs are: monthly rental, rental excise taxes, maintenance costs, insurance, property taxes.

The items in the one-time category can be combined into a single figure called the net investment. This is the net amount of funds that must be invested if the equipment is purchased, over and above the amount that must be invested if it is rented. The gross investment includes the purchase price of the equipment, the excise tax on this price, and any other differential costs required to obtain and install the equipment.

From the gross investment, cost elements that reduce the net amount of funds required are deducted to arrive at the net investment. These deductions are: (1) estimated salvage value, if any, at the end of the equipment's life, reduced to its present value, and (2) the initial payment, if any, that must be made if the equipment is rented.

The items in the periodic category can be combined into another figure called the net annual rental. This figure compares the periodic costs avoided through ownership. This figure is different from the annual rental itself, however, which usually overstates the costs avoided through ownership. In particular, maintenance of rented machines usually is provided by the manufacturer, whereas he usually makes a charge for such service on equipment he sells. Also, the manufacturer usually bears the cost of insuring his machines against fire and casualty loss, and also will pay property taxes levied against them. These costs incurred by the purchaser of the equipment, but not by the lessee, reduce the gross annual rental to give what we term the net annual rental.

Please note that one-time costs and periodic costs are not synonymous with purchase costs and rental costs, respectively. The classification depends solely on whether the cost item

occurs just once or whether it occurs continuously over the life of the equipment.

It should be noted, too, that no harm is done if identical items are listed both as costs associated with buying and costs associated with renting. They will wash out in the final result. Although it may involve a little more work, some may prefer to include these common costs in the calculations since this helps to ensure that nothing has been overlooked. Such a practice also may help to make the analysis more understandable to those to whom it must be presented.

Let's apply this theory on our model worksheet with the actual calculations of a problem we had at Stanford. We arrived at the net investment figure for a particular accounting machine by adding:

Purchase price.....	\$29,449
Excise tax.....	1,767
Sales tax.....	1,013
<b>Total investment.....</b>	<b>\$32,229</b>

and by subtracting:

Educational discount.....	\$5,889
Salvage.....	\$2,104
x Table A factor 0.790	1,662
	(7,551)
<b>Net investment.....</b>	<b>\$24,678</b>

The only calculation that requires judgment or estimates is the salvage value and the Table A factor of 0.790, which is taken from the "Present Worth of \$1 at Compound Interest" table at the six-year period under the 4 per cent interest column. And how did we arrive at these judgments or estimates?

It is our considered opinion that the manufacturer will always give a trade-in allowance of at least 5 per cent of the original price when a purchaser of its equipment is preparing to buy a later model machine of the same make. This opinion is a matter of judgment, and there is no written material to substantiate it.

In estimating the useful life of a machine, you consider only the shortest of (1) its physical life, (2) its application life, or (3) its technological life. The technological life of equipment is usually the shortest, and hence the most important, of the three life categories. It is the number of years expected to pass before a new model is introduced that can significantly outperform a given operation. Its importance from the present point of view is that the improvement is expected to reduce the total dollar costs of the operation, including la-

# STANFORD WORKSHEET TO DETERMINE WHETHER TO PURCHASE OR TO RENT ITEMS OF EQUIPMENT

Net Investment	Net Annual Rental
1. Purchase price, f.o.b. mfr.....\$29,449	6. a. Rental payments, \$802.50 per mo. $\times$ 12 \$9,630
2. Add the following costs if incurred only on owned equipment:	b. Annual premiums on multishift use..... —
a. Excise tax on purchase..... 1,767	7. Excise tax on rental..... 963
b. Sales tax..... 1,013	8. Gross annual rental, (6) + (7)..... 10,593
c. Transportation in..... —	9. Subtract following annual costs
d. Installation cost..... —	If incurred only on owned equipment:
e. Other initial costs..... —	a. Educational contribution..... \$2,119
3. Total investment, (1) + (2)..... 32,229	b. Insurance..... —
4. Subtract following items:	c. Property taxes..... —
a. Educational contribution... \$5,889	d. Maintenance, parts..... 1,930
b. Lease down payment..... —	e. Miscellaneous..... —
c. Salvage value... \$2,104	10. Net annual rental, (8) - (9)..... 6,544
$\times$ Table A factor 0.790 1,662	11. Estimated useful life..... 6 years
d. Total deductions..... -7,551	12. Calculating factor, Table B..... $\times$ 5.338
5. Net investment, (3) - (4)..... \$24,678	13. Total annual rental..... \$34,932
ACTION: BUY <input checked="" type="checkbox"/> RENT <input type="checkbox"/>	
Mfr. and Model—	
Serial Number—	
	Decision Figures
	14. Total annual rental..... \$34,932
	15. Net investment..... 24,678
	16. Total savings..... \$10,254

bor cost, sufficiently to warrant the immediate acquisition of the new model.

Here, again, judgment becomes paramount. In our case, we felt this particular accounting machine would be considered first-line equipment until 1960, and second-line equipment until 1965, at least. Statistics indicate a 10 year first-line life for most of this manufacturer's equipment, and this machine was first introduced in 1948. However, there is no known replacement planned for the model at this time.

This life estimate was further tempered with the knowledge that the manufacturer will write a service contract on this equipment for nine years only. Since it is already three years old, there remains only six years of use which will be guaranteed by a service contract. Consequently, we chose six years as our useful life period.

Every owner of a machine takes a risk in purchasing because he is less flexible in his actions than is the user of the rented machine. If gradual improvements in equipment take place, a rented machine can be returned and the later model obtained, whereas owned equipment probably cannot be disposed of without a considerable loss. If the machine turns out to be a "lemon," if some major breakdown occurs that is not covered by the maintenance contract, if the machine becomes inoperative through neglect,

accident or some other cause not covered by insurance, the rented machine can usually be replaced at little or no extra cost, but an owned machine must ordinarily be either repaired or discarded. Furthermore, the owner of a piece of equipment assumes the administrative chores of maintaining records, computing depreciation, keeping the machine insured, and so on. Therefore, the estimated cost of purchase risk must be added to capital cost.

Because of its lower capital cost, it is reasonable to expect that the average nonprofit organization should use a lower required earnings rate than the business company uses. It follows, both because of its lower required earnings rate and because its savings are not subject to income taxes, that the average nonprofit organization will be more inclined to buy machines than will the average profit seeking business. Bearing all this in mind, we arrived at a 4 per cent return as the lowest possible rate that should be applied.

To complete our worksheet, we must arrive at a net annual rental, which is calculated as follows:

Rental payments \$802.50 $\times$ 12.....	\$ 9,630
Excise tax.....	963
Gross annual rental.....	\$10,593
Subtract:	
Educational contribution..	\$2,119
Maintenance.....	1,930
	(4,049)
Net annual rental.....	\$ 6,544

The net annual rental is multiplied by the Table B factor of 5.338, a total of \$34,932, which is six years at 4 per cent interest, the same number of years and interest rate previously determined, taken from the "Present Worth of an Annuity of \$1 at the End of Each Period" found in the back of your Accountants' Handbook. A word of caution here. The table in the Accountants' Handbook is, generally speaking, used only for year periods. Since rental fees are usually paid monthly, we converted the table so that the title should read "Present Worth of \$1  $\div$  12 Received Monthly for N Years."

The calculations now read:

Total annual rental.....	\$34,932
Net investment.....	24,678
Total savings through ownership....	\$10,254

We decided to buy the piece of equipment. It's that simple.

The worksheet approach can be used on any piece of office equipment when you have the option to buy or to rent.

This approach is fully explained and documented in the book "Office Equipment: Buy or Rent?" written by Robert H. Anthony and Samuel Schwartz, published by the Management Analysis Center, Inc, 275 Newberry Street, Boston 16. We were fortunate in having this book in our library when this problem arose. Much of the theory used here comes directly from the book. #



# Operating Policies for Bookstores

**AL ZAVELLE**

Director of Campus Stores, New York University

LAST YEAR I acted as consultant to a growing state university in planning the layout, organization and merchandising policies for its new bookstore, which by this time, no doubt, is in operation. In preparing my written report, it became clear that this school's problems with its bookstore are the problems most schools have. For that reason the following excerpts from my report should have universal application.—A.Z.

THE BOOKSTORE SHOULD HAVE AS ITS primary aim the furtherance of education, which is the university's primary aim. However, unlike the academic departments, the bookstore is by its nature a business. It should, therefore, be treated like a business, with all the advantages and disadvantages that normal business enterprises encounter.

The main difference between a university owned bookstore and a completely commercial enterprise is that the main function of the commercial enterprise is to show a surplus while the main function of a university bookstore is to further the aims of the university. Yet, while not a main purpose, most well run university bookstores show a surplus in the normal course of their operation. This is desirable.

The administration can then set up two criteria to determine how good a job the bookstore is doing:

1. As part of the university, how well is it serving the needs and desires of the university family? (Student and faculty attitudes toward the bookstore can be quickly determined.)

2. As a business, how efficiently is the bookstore operating? If charged all costs that businesses normally encounter (rent, light, salaries, depreciation) and if operated at a markup on cost of goods which is fair, does the store show a surplus?

Within the framework of this concept, I make the following recommendations regarding the operation of your store.

## PHYSICAL LAYOUT

The administration has wisely left space for future expansion of the store. There should be a minimum of 1 square foot per student.

A self-service layout with a check-out rather than a clerk service layout would serve your purpose best. The reasons for this are summarized in a recent study entitled "A Survey of College Store Operations" prepared by the market research department of the National Cash Register Company.

This study, as well as the experience of most people in the college store field, shows that self-service with checkout can best handle the large number of students who want to purchase their books and supplies in a short period of time at the beginning of the semester. And it can give maximum sales and service during the semester with a minimum number of store employees.

## PERSONNEL

The salary schedule established should be comparable to that which retail enterprises pay for similar jobs in your area. An incentive system should be established to encourage employees to do their best. Competent

personnel should be available, as work in a college store is light, pleasant and not overly technical; moreover, the store deals with an intelligent group of people (faculty and students).

New employees should be hired based on the needs of a retail store. I recommend that one or two persons, college graduates preferably, be employed to run the book department. The technical training they need can be acquired by attending the National Association of College Stores summer workshop in Oberlin, Ohio. Further training can be had by sending such persons to work as apprentices in other college stores for a time. Work in your university bookstore will round out their experience. And reading the *College Store* magazine, as well as other articles written in this field, will give background that could otherwise be acquired only by years of work and concentration in the college store book field.

## PRICING POLICY

I recommend that your store sell at or close to the manufacturers' suggested selling price. Different lines of merchandise will, on this basis, have different markups. New textbooks in general have a margin of 20 per cent (a 25 per cent markup), and most items on the list mentioned in the preceding section have a margin of 40 per cent. Maintaining such a pricing



policy will cause less criticism from merchants in the community.

#### WHAT TO DO WITH SURPLUS

Since the store is a business enterprise, one of the best ways to determine its efficiency is by business standards: If charged all normal business cost, does it show a normal surplus?

I recommend you use this yardstick: A surplus can be used in a number of ways: (1) to improve the store and its services; (2) to go into the university general fund; (3) to reduce the cost of books by selling them at less than publishers' list price and thus make education more "affordable" to students from low-income families; (4) to help support a social, educational or cultural program on the campus, perhaps through the student union; (5) to provide a student scholarship or student loan fund; (6) to be returned to the students in the form of dividends (as done by co-ops, such as the Harvard and Princeton University stores).

In any event, a surplus can be used to benefit the student body. It should be planned for—and used.

#### BOOK DEPARTMENT

While a college store should stock a well rounded selection of merchandise, especially items of cultural value such as records and prints, the book department should be the most important department. The store's right to exist should be judged by the quality of service it renders in this department.

The book department should stock: (1) texts, new and used; (2) books of general interest; (3) reference books; (4) college outlines; (5) remainders; (6) paper backs, and (7) prints.

It is desirable to have a single integrated book department. All the items aforementioned should be displayed together. This will increase the sale of textbooks as well as other books. The bookstore should do everything possible to encourage students to browse, read and buy books. Your store is planning to devote considerable space to the display of paper back books just for this purpose. An integrated book department will perform this function better than any other.

The store should stock an adequate supply of textbooks to fill student needs at the beginning of the semester when books are needed. If texts are in short supply, the store should be in

a position to reorder quickly and should spare no expense to get the books quickly, even if it means air mail, air parcel post, or air freight. The store will never have exactly enough books of all titles, even if it overstocks drastically (and this is certainly not advisable). Thus it should be a normal procedure to reorder quickly and to get books by the fastest means available.

The store should stock both new and used textbooks. Used textbooks are available on your campus now; students are selling to each other on the "curbstones." The store should perform this service because students want it; because students short of funds to attend the university need it; because the store can give this wanted service, reduce the cost to the student, and still have a better operating margin for itself. Used books make sense in every way. No college store book department is performing its full function without them.

#### USED BOOKS

The best method of obtaining used books is by purchase from your own students. The store should be in a position to pay out cash on the basis of a simple purchase voucher prepared in the store, with a system of control by the accounting department so that there is no temptation for store personnel to falsify or prepare fraudulent vouchers. Vouchers issued

by someone authorized to make cash purchases, signed by the student receiving the payment, and paid by the cashier at the checkout will cut fraud to a minimum.

Used books can be obtained from wholesalers specializing in the area. All such firms publish a buying guide that can be used to set prices for books to be purchased from the students. Most college stores repurchasing books from their students pay 50 per cent of the publisher's list price and resell them for 75 per cent of the publisher's list for books reused on the campus. For discontinued books the price in the "Buying Guide" is offered.

For use of its Buying Guide a firm requires that all discontinued books be shipped to it. The store is paid a commission of from 10 to 15 per cent above the prices in the guide for books shipped to the wholesaler. The wholesalers will also send a book buyer to your campus at the end of the semester to buy books back from students. Books to be reused on campus can be retained by the store with the wholesaler taking the rest.

Used books can also be obtained from other college stores through the use of the National Association of College Stores' "For Sale List," which is published weekly.

Used books are also obtainable by sending lists directly to some 200 college stores that act independently of

Integrated paperback-text display at N.Y.U.'s campus store, University Heights.





CERTAIN INTRODUCTORY ASPECTS OF A training program for management were considered in last month's article. It was pointed out that the internal auditing division of a college or university provides an ideal training ground for management trainees. Many trainees are recommended originally by the accountancy department of the educational division of the institution, with which department there is usually close cooperation.

The trainee is fitted into the auditing division according to the organization for that division which, in turn, is dependent upon size and upon the trainee's educational and experience background.

The larger auditing division, for instance, will have an assistant auditor, a supervising auditor, and the regular staff—usually senior auditors—all headed by the auditor. In this kind of organization, trainees with limited background starting as junior auditors may be assigned one to each senior of the regular staff or they may be considered as trainees-at-large and assigned by the supervising auditor to seniors as needed by them for audit detail work.

Also, in the larger auditing division, the trainee with an expanded background probably will come into the organization as a senior and will receive an audit assignment, large or small, according to the breadth of his education and experience, from the supervising auditor. The supervisor, of course, will spend a good deal of time in orienting the trainee by explaining in detail the background of the activity or account to be audited and by exploring the appropriate audit procedures for the account. Thereafter, he will answer the trainee's questions and offer guidance to him.

In the organization of the smaller auditing division, the auditor, himself, probably will be the only staff member with supervisory status. Therefore, trainees with limited background will be assigned by him either one to each regular senior or to the seniors as they require the assistance of a junior. Trainees with expanded backgrounds will be given audit assignments by the auditor—again, the size and delicacy of the audit assigned depending upon the experience and training of the senior trainee.

Summer trainees provide the solution to a natural problem of a comparatively large auditing division of a university. At the beginning of each

summer, many fiscal year-end audits appear upon the horizon—inventories, cash and sales reconciliations, including the reading and setting back to zero of cash registers, and certain funds and auxiliary enterprises that are audited customarily at the completion of a fiscal year.

A summer trainee, recommended to a fairly large auditing division of a university by the accountancy department of the college of business administration, was desirous of the additional experience a summer's work would give him. He held a nine-month, part-time teaching appointment during the year. He had a certified public accountant's certificate and was working on his doctorate degree in accountancy, specializing in governmental accounting.

Because of the breadth of his background, this trainee was assigned a large fiscal year-end audit that would last the entire summer—the student organizations fund of the university. With guidance from the auditing division, he turned in a commendable audit report at the end of the summer; an outstanding feature of it was a redesigning of the standard bookkeeping record used by each student organization. The record was simplified and clarified to the extent that it could be understood easily by a student organization treasurer who had never had a course in bookkeeping or accounting.

Audits smaller than the student organizations audit are used for trainees who are just beginning "to try their wings" as far as doing an audit on their own is concerned. One example of such an audit would be the reconciliation of the deposit account for university building keys to a card file of keys outstanding.

Auditing work provides, of course, ideal "learning" material for trainees because of its great variation; no two audit jobs are exactly alike, even if they are concerned with the same account. This fact is traceable to the nonroutine characteristic of internal auditing.

Excellent initial training material for someone just starting is the policy and procedures manual for the institution. The trainee should be given the opportunity to read the manual on the job.

The regular luncheon staff meeting of the auditing division may be used, also, as a medium of training. Each year, these meetings may be conducted as seminar discussions on a chosen topic. Such a topic could be on auditing procedures or it could be on getting along with people, "internal human relations."

Other training devices that can be employed are: circulation of correspondence that is considered to be a significant addition to the knowledge of the regular staff or trainees; routing to all desks the final copy of the minutes of each meeting of the board of control, and circulation of a file copy of each audit report. Also, periodicals on auditing and management may be routed to regular staff and trainees; certain items should be marked for reading so as to limit the time so used.

Finally, it is important to maintain an up-to-date library in the areas of the American Institute of Certified Public Accountants' publications, accounting including C.P.A. coaching materials, auditing, management, general business, writing aids, and such miscellaneous books as titles on improving one's effectiveness in dealing with others. #

## Auditors Aid Administration Through Training Programs

A. E. MARIEN

*Internal Auditing Division, University of Illinois, Urbana*





Robert C. Frampton Photos

# Housing Graduate Students

**W. MARK DURLEY**

*Director of Student Housing  
Claremont College, Claremont, Calif.*

OFFICIALS OF CLAREMONT COLLEGE decided two or more years ago that the time had come to stop plugging holes and to begin the construction of permanent housing for the students of the graduate school. Such a building has now been constructed and has been given enthusiastic endorsement by the occupants.

Before selecting an architect for the job, the administration consulted past issues of *COLLEGE AND UNIVERSITY BUSINESS*, visited other colleges in the vicinity, sent questionnaires to the students, interviewed occupants of

the temporary housing on campus, made a survey to determine the ratio of married to unmarried students, sought ideas from owners and managers of commercial apartment houses, and finally wrote a "bill of particulars." Our "bill" was then revised by the buildings and grounds committee of the board, the dean of the graduate school, and the campus engineer.

We selected the architectural firm of Criley and McDowell and gave it the "bill of particulars."

The construction site, 150 by 150 feet, was on a street corner, with the

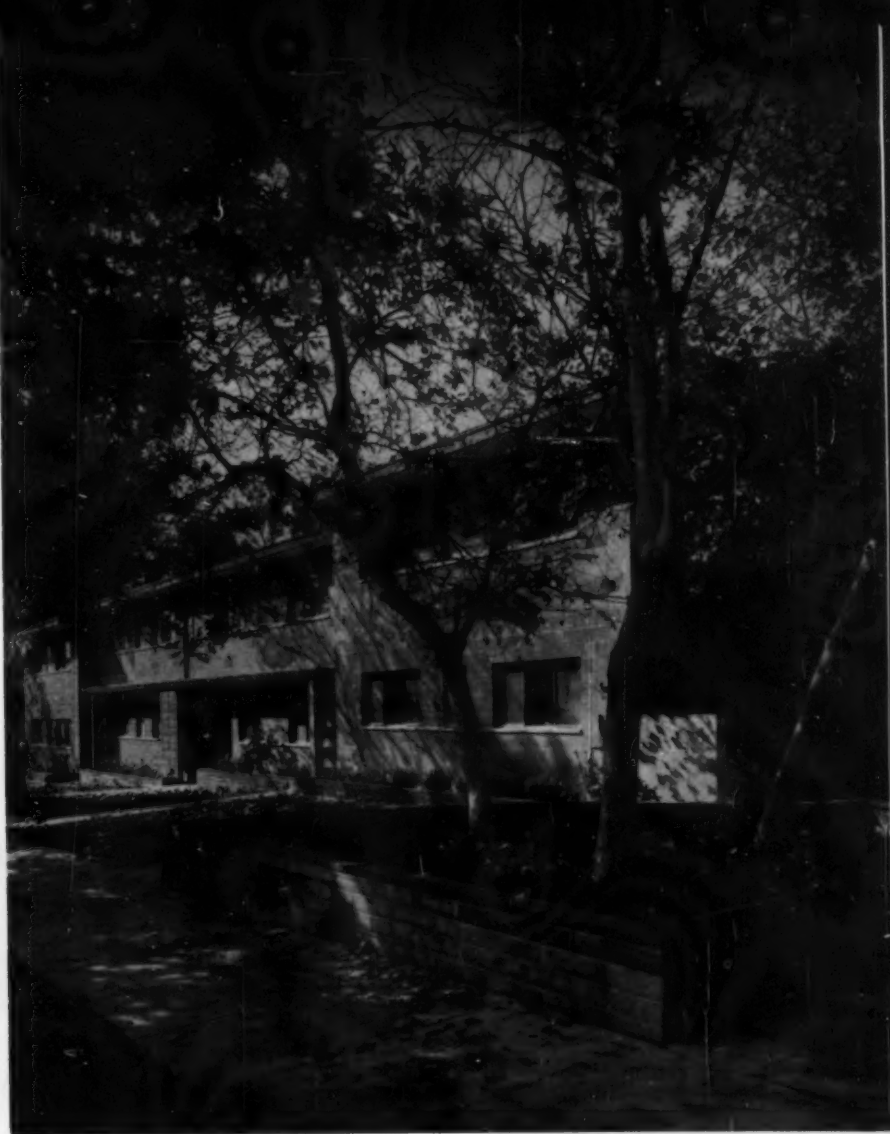
ground sloping on the diagonal with a 6 foot drop from northwest to southwest. We wanted a building that was not only earthquake-proof but also as nearly fireproof as it could be. To meet these specifications, the architects designed a reinforced concrete block structure with concrete slab floors and filled concrete block partitions between apartments. The second floor slab was specially designed with void to cut down the transmission of sound. The flat roof was covered with slag from a near-by steel mill. All in all, not only did we





Right: Across the front of the new building are 14 single rooms, eight on the second floor and six on the first. Opposite Page, top: section of living room in typical apartment; below: each wing has eight apartments, four on each floor. COVER PICTURE shows another view of the new Graduate Residence Building.

Layout of a typical apartment for married students at Claremont.



get a fireproof building but also acquired one that is almost soundproof and is cool during our hot summer months as well.

In the block "C" shaped building are 18 apartments and 14 dormitory rooms. Apartments are in the wings and single rooms across the front. There are four apartments on each floor of each wing, eight single rooms on the second floor, and six on the first, leaving room for the dormitory common kitchen and lounge.

Our "bill" called for the architects to engineer-out maintenance. By this we meant for them to set up the plans and specifications so that we would pay a little more in the beginning rather than pay heavy maintenance costs in the years to come.

As the result of this program, all exterior doors are of steel to prevent warping; counters, shower stalls, walls behind ranges, and the like are covered with ceramic tile; water pipes are of copper, as are roof eaves and

downspouts; telephone and TV jacks are installed in the rooms; exposed screens are of aluminum, and all window sash are metal.

We selected furniture carefully for both design and durability. Basically it is of square steel tubing welded joints. Surfaces calling for hard finishes are covered with wood-grained plastics impervious to stains, cuts and burns. Chairs are covered with soft plastic materials which are easy to clean.

#### DESIGN SPECIAL DESKS

We are particularly pleased with the desk we designed. Tests made by students to determine the proper size of desk top and good drawer arrangement indicated that the top should be larger than standard and that a file drawer should be placed high, rather than low, on the single pedestal type of desk. The top is 42 inches wide and 26 inches deep; thus there is plenty of room for a

typewriter, a row of books, and all of those extra papers that are necessary while writing a thesis.

In addition to the standard items of furniture, we have included a garbage disposal unit in each sink to reduce the fire hazard, a wall fan to get the cooking smells out of the apartments, and a washer-drier room.

Dormitory rooms are grouped in pairs with an adjoining bath. Each room has its own lavatory and medicine cabinet.

The college does not furnish linen for either the apartments or the rooms. Utilities, except for gas in the apartments, are furnished as part of the rent. Experience prompted us to set the rent on a semester basis rather than monthly to assure full occupancy. We have had to turn down two out of every three applicants for the apartments and now are back in the business of operating converted residences for the overflow of applications for dormitory-space. #



## ***New Library Recalls Historic Past***

**R. B. O'CONNOR and W. H. KILHAM Jr.**  
*Architects, New York City*

THE UNIVERSITY OF LOUISVILLE IS THE cultural center of the city. It lies close to the hearts of the people, so it was not surprising that several years ago the voters approved a \$2 million bond issue to provide a new university library, including the air conditioning of it and certain other buildings.

While the architects were studying the future growth of the university

and were appraising the site, climate and similar factors, the librarian, Evelyn J. Schneider, and her staff were drawing up the functional program based on an open stack library. In final form, with the consultative assistance of Charles W. David of the University of Pennsylvania Library, this called for the minimum number of floors, maximum concentration of technical activities, and correspond-

ing simplicity of supervision of both staff and readers.

Gradually these and innumerable other functional needs were crystallized in diagrammatic plans. Service access being from the east, shipping and receiving was located there and led logically to processing operations and staff working quarters on that side of the building. On the other hand, the normal campus approach was from the west so that the general disposition of staff and public areas was beginning to evolve.

Two large reading rooms were needed, one for reference and the other for general studies, which was to include books on closed reserve. Together these were to seat 375 and to demand the closest reader supervision. A plan of the main floor therefore emerged with the staff area on the east surrounded by a U-shaped band of public and reading space. At the very center were the card catalog and circulation desk—heart and control point of any library—together

Reading room with wall for exhibits.

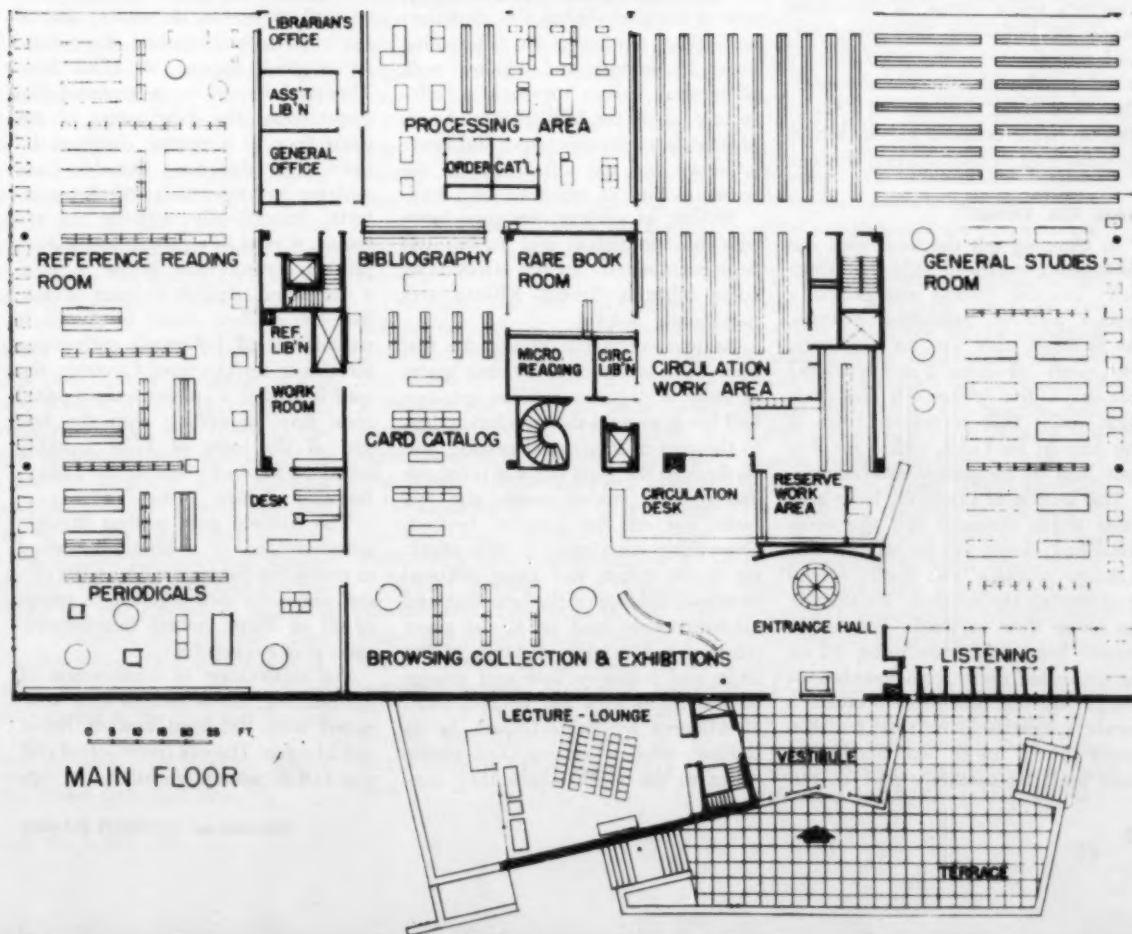




City of Louisville's most cherished document, its original charter of 1780 from hand of Thomas Jefferson, rests, in a bronze frame, atop walnut column under dome

with the circular stair leading down to the lower and principal stack floor.

With such an arrangement the reading rooms naturally took up the north and south ends of the building, their supervisory personnel located toward the inner center where they had adjacency to other staff functions and at the same time had easy control close to the entrance doors. Of the two, the reference room was placed on the north where it was nearer to





the much used card catalog and bibliography. The general studies room, which has high traffic for the use of reserve books, was then placed at the south end immediately adjacent to the main entrance.

A similar plan was followed on the stack floor, the ranges of books occupying the U-shaped sweeps around the area of staff, seminar and service rooms.

The program of 400,000 volumes as against the former 125,000, and 600 readers as compared with 200, therefore, worked out in logical fashion in two floors of 224 by 138 feet with virtually no increase in professional staff.

Two residual problems of some acuteness remained. One was the treatment of south and west light, which is hard on books and readers, and is difficult to control. The other was to relate a two-story building satisfactorily to a flat site without sinking the lower floor below grade or having a great flight of steps to the upper entrance.

The first was handled by omitting west windows altogether and by substituting circular skylights so tilted to the north that direct rays of the sun do not pass through them, and by shielding the sunlight from the south windows by a series of horizontal panels of teakwood containing vertical vanes set in staggered pattern in an exterior aluminum framework. The consulting services of Aladar Olgay were retained for his advice on solar control and shading devices.

#### WALL FOR EXHIBITS

In blanking out the west wall and substituting overhead light, one especially valuable feature was gained, a perfect wall for exhibiting pictures. To facilitate this use an aluminum wire mesh (of about 3 inch squares) was set a few inches off the plain brick wall. This permits pictures of any size to be hung, either for student loan or temporary exhibition.

This section of Louisville lacks adequate storm drainage and the occasional flash floods can be serious. The drainage problem was finally solved by accepting the necessity for placing the lower floor of stacks just above ground level and then using all of the excavated earth from foundations and mechanical basement to create a terrace somewhat more than half the height of the lower floor across the south and the southerly part of the

west façades. On this, in front of the entrance vestibule, was then built a small paved plaza at main floor level so that in entering the building one goes first to the terrace and then by an equally easy half-flight of steps to the entrance level.

Planting has been carefully used to ease the transition in grade, with the final result that increased dignity has been gained for the library without competition in scale with surrounding buildings and without the psychological deterrent of a monumental flight of steps. On an otherwise flat campus, it has even become a feature of special note now referred to by the students as "the mountain," perfect for over-all views of the campus or the taking of a class picture on its slopes.

#### HARMONIZES WITH NEIGHBORS

The new library has dignity of approach but not overpowering scale. Its pink brick splits the range of color of its red brick neighbors and harmonizes with them, while recalling their white trim by the Alabama limestone with which the projecting lecture-lounge on the western façade is clothed. But at no point has the contemporary character of the library's design been dissembled. The double row of tilted skylights, the aluminum and glass vestibule, the alternating areas of masonry and window wall, all bespeak today's approach to architecture, as do the brilliant blue bands of porcelain between upper and lower windows and the softer blue of the mosaic soffits of vestibule and roof.

Within, as without, the same interplay of stimulation and repose has been maintained. In the selection of color schemes Teresa Kilham was particularly helpful.

As one enters the library the first impression is one of continuing space, of vistas urging one on. The entrance hall bends around the circulation desk to the area of the central catalog, and on through the glass walls of reference and general studies rooms the eye looks out to the campus beyond. Everything contributes to this effect: the quiet colors and more diffused overhead lighting of the browsing and exhibition area lead on to the gayer coloring and brighter lighting of the large end rooms—yellow and orange on the north with the jeweled head of Minerva by John Urbain in its brilliant window setting, and cooler colors to the south where they con-

trast with the sparkle of sunlight across the campus.

Yet when one sits to open a book in this new library it is found this has been accomplished without a feeling of distraction. The height of shelving, which comes just above the eye-line of seated readers, is generally used to break up the size of the large rooms and serves to bring the individual back to his own surroundings. This and the quiet of rubber flooring and acoustical ceilings make the library a desirable place to work.

One other element that contributes to the unusual sense of space in this open main floor is the doubling of the structural spans. On the stack floor below, the module of 22½ by 24 feet is used throughout. But on the upper, entrance floor where only roof loads need be carried, the alternate columns have been omitted so that a band of 45 to 48 feet wide surrounds the central core without an intervening support. The greater height of ceiling and freedom from structural columns thus gives a feeling of unusual spaciousness and flexibility in the use of space.

#### TOWNSPEOPLE'S LIBRARY, TOO

Bearing testimony that this library belongs to the people of Louisville as well as to the university, one of the city's most cherished documents, its original charter of 1780 from Thomas Jefferson as governor of Virginia, forms the focal point of the main floor in a setting designed by the stage designer, Donald Oenschlager, in cooperation with the architects. Immediately opposite the entrance, it rests in a bronze frame with printed transcription below it, atop a truncated walnut column which, like the shallow dome overhead, is reminiscent of Jefferson's enthusiasm for classic architecture. Covering the wall behind is a curved walnut panel from floor to ceiling with the first plat of the town of 1779 superbly inlaid in Kentucky woods by Philipp Rimmeler of New York.

The historic past is thus fittingly acknowledged in a library designed to enrich the future, and here the city and university join together in recognition of their mutual interdependence and responsibility.

For supervision of construction of the building, the architects were associated with the local firm of Nevin and Morgan. The net construction cost was \$18.50 per square foot. #



# After a relatively short youth, *Development Comes of Age*

ROBERT F. DUNCAN

Consultant, Kersting, Brown & Co., Incorporated, New York City

THE TERM "DEVELOPMENT" IS COMING to cover a whole new area of educational administration, including three activities: (1) alumni affairs, (2) publicity and public relations, and (3) fund raising. Increasingly, we see departments of development headed by a vice president, reporting directly to the president, responsible for these three activities.

We now have in educational administration a third estate in addition to the two of education and business management. Some will advocate another area—student affairs—but I prefer to include that under the heading of education. In many institutions still receiving less attention than education or business management, development is growing rapidly as administrators realize its great potential. The American Alumni Council estimates that there are approximately 600 organized departments of development among the 1800 American colleges and universities. Thus, in less than 40 years has sprung up a wholly new area of activity in education.

## DANGER OF GENERALIZATION

One great danger in discussing this subject is the danger of generalization. Certain statements that apply to the larger institutions will not apply to the smaller. Similarly, some methods applicable to small liberal arts colleges vary from those employed at the universities; tax supported institutions conduct some activities inapplicable to the gift supported, and vice versa. Women's colleges use some methods impracticable elsewhere. And, because large-scale educational fund raising started in the East and worked

westward, there may be differences that are due to geography.

In attempting to prepare something that might be helpful, I have tried to determine where many institutions stand development-wise. While what follows may have some interest for tax supported institutions, my remarks are directed to those that cannot rely on tax funds.

## STRATEGY OF FUND RAISING

I have always been intrigued with the similarity of large-scale fund raising to military affairs, so I will use military terms and group my observations under (1) strategy and (2) tactics. I like the definition of a campaign as "that period during which an army is in the field."

Strategy is the art of so moving or disposing troops, ships or aircraft as to impose upon the enemy the place and time and conditions for fighting preferred by oneself. Thus we attempt to control the larger aspects of fund raising!

**The Plan.** The first step in any development work is always based on two assumptions: (1) that the institution needs money, and (2) that the authorities are united in their determination to seek it. The former is easier to come by than the latter. By what means will the money be sought?

In preparing the plan, bear in mind the four major methods by which education is now raising money:

**Annual giving.** The American Alumni Council estimates that in 1957 some 600 alumni funds yielded \$50 million, mostly in the form of unrestricted money. This plan, started by Yale in 1892, now produces an income equivalent to that on an endowment of \$1¼ billion at 4 per cent.

**Capital or intensive campaign.** This is a monolithic effort for the success of which the institution marshals all possible resources for a one-year or two-year drive: faculty, staff, alumni, parents, corporations, foundations, townspeople and friends wherever they may be.

**Bequest program.** Nearly 90 per cent of the endowments of all American colleges and universities have come through bequests.

**Cultivation and solicitation of selected prospects.** This method is known in the trade as "the quiet special gifts campaign" and has many adherents, especially those who have rejected the capital "drive."

These are the choices, and, of course, there are many variations. But decision at this point is the first of many that an institution planning development work must make. Because I have had experience largely with capital campaigns, I am prejudiced in their favor.

True, capital campaigns can be disturbing to the even tenor of the academic life. They can be upsetting to administrative officials, but they are the only known fairly certain means of getting substantial cash quickly. And if they are successful there is no better morale builder for faculty, staff and alumni. Beyond that, if well handled, they raise the standard of alumni giving; they set a new pattern that can be perpetuated to yield much larger gifts in following years. Many an academic community has had a wholesome shake-up through a capital campaign.

A well developed plan will describe the form of organization of paid staff and volunteer committees, outline the publicity material, and provide a time schedule and budget. (Con. on p. 34)

From an address given before the Western Association of College and University Business Officers, Carmel, Calif., April 1958.

## Development Decalogue

1. Determine the policy regarding technical assistance. If professional aid is to be enlisted, introduce it at the start and follow it.
2. Create a plan based on the large body of fund raising knowledge accumulated over the last 40 years.
3. Prepare a thoroughly documented case proving the need for the money and explaining how it will be used.
4. Make certain of the wholehearted and continuing support of representatives of faculty, administration, trustees, alumni and all others whose assistance is essential to success.
5. Budget enough money to do the job properly. "Do it right or not at all."
6. Concentrate early on the big gifts.
7. See to it that the institution acts as though it considered the program important. It is not sufficient merely to say that it's important. Announcement that the president is taking a year's leave of absence to devote his whole time to a campaign is vastly more convincing than any amount of exhortation. At most institutions a capital campaign for millions is, and should be, the most important development of a generation. It deserves, and for complete success requires, all the power an institution can muster. Here is a great challenge to presidential and alumni leadership.
8. Money is best raised in an atmosphere of urgency, universality and optimism. Do everything to create it.
9. Leadership is best expressed through "a little group of willful men" and/or women. Campaigns led by such a dedicated band seldom fail.
10. Never forget that all the writings, meetings, mailings, travel, dinners, luncheons and talk—even the endowments, buildings and scholarships resulting therefrom—are merely means to an end: a better education for the student. No one should ever be permitted to lose sight of the alternate goal.

**The Case.** The second essential in fund raising strategy (some people put it first) is to prepare the case—the *raison d'être* for any type of fund raising. Frequently a joint trustee-faculty committee is an effective method of analyzing needs and getting them clearly stated.

An adequate fund raising case usually is based on the answers to some pretty searching questions, such as the effectiveness of the educational program, the quality of business management, the effectiveness of the governing board, the status of the alumni organization, the state of local public opinion, and, of special importance, the relation of the president to the fund raising plan. The position of the president, especially in a capital drive,

is vitally important and should be clearly determined well in advance. Prospective donors want to see the head, not some subordinate, however grandiloquent his title may be.

**Other Decisions on Strategy.** In a leaflet recently published by the American Alumni Council on "Preliminaries to a Development Program," I described under the heading, "Before You Act," other strategic decisions that should be made early, certainly before the plan has been submitted to the board of trustees for final approval. All too frequently—at least in preparing for a monolithic campaign—sufficient time is not taken by the president and his advisers to do the high-level thinking and to make the decisions on which fund raising strat-

egy can be based. At least a year is usually required to prepare an adequate case.

For example, alumni and parents are deeply interested in questions of enrollment growth, admissions requirements, course of the tuition fee, methods of financing, and future plant requirements. Answers to major policy statements of this nature are effective in showing that an administration knows in what direction it is headed and what the financial requirements are in order to reach its destination.

In addition to preparing the case, it may be worth while to spend several months carrying that case to a series of informal regional meetings of alumni, parents and friends.

## IMAGINATION AT PREMIUM

The amount of imagination that educators exhibit business-wise varies greatly. One needs only to read President DeKiewiet's "Tomorrow Is Too Late" to see what bad economics have frequently been employed.

Every institution about to embark on raising money has two primary tasks: (1) to develop a strategic plan, and (2) to present its case in its most attractive, convincing terms. Next to the president and the chairman of the board of trustees, the business manager could be the most effective advocate of this approach. At more than one college the business manager or controller has exerted powerful leverage in getting a fund raising program off the ground.

For the college that wishes to set forth alone on the potentially tumultuous seas of fund raising, there are many logs of earlier voyages and a few instruments of navigation, but for the institution planning any first-time, large-scale effort—especially a monolithic campaign—from the vantage point of experience and approaching retirement, I will say: "Don't go it wholly alone. Get an experienced navigator aboard, even though you send him home from the first port of call."

Large-scale fund raising is now big business, and I know of no enterprise in which amateurs can so quickly and thoroughly become immersed "in the thick of thin things" to their enduring embarrassment and that of their beloved alma maters.

## FUNCTION OF CONSULTANT

Any college seeking guidance in raising money can obtain it at mod-

erate cost. I would make only three suggestions: (1) Get the best advice obtainable; (2) follow the advice, and (3) realize that even the engagement of professional management of a campaign is only the beginning of the institution's fund raising efforts. Professional consultants do not raise money; they suggest and advise and help to organize an institution's constituency to raise money. They bring to an institution the results of experience in many campaigns, but only the institution's volunteer alumni and friends can raise the money.

Competent professional counsel, whether retained merely to advise and consult or to provide full-time managerial service, is now standard practice with fund raising programs ranging from relatively small private schools to the largest universities.

#### TACTICS OF FUND RAISING

Tactics is the moving of military, naval and air forces in "actual contact with the enemy." Here is the point where the money is raised.

*Personal solicitation.* Money is most effectively raised when a volunteer advocate of a college asks an informed prospect for it face to face. As Alexander M. White, general chairman of the current Harvard campaign, points out, raising money is something like getting milk from a cow. You can't write a cow a letter, call her on the telephone, or send her a telegram. You have to sit down beside her and go to work.

I would add that this personal interview, wherever practicable, whether in a monolithic campaign, annual giving, a bequest program, or "a quiet special gifts effort" is the "be all and end all" of all the preparatory work, remote from this interview as much of it may appear to be. One of the phrases that should be on the wall of every development office is: "Somebody must ask somebody for some money."

#### "COSTS MONEY TO RAISE MONEY"

*Fund raising costs.* Another phrase that is nearly as old as organized fund raising is: "It costs money to raise money." One of the greatest obstacles some consultants have is in persuading clients that insufficient and inefficient manpower and womanpower can greatly handicap a development program. This reluctance may spring from the fact that few amateurs have any idea of the enormous amount of

detail work required in preparation for fund raising.

*Concentration on the large gifts.* There is a saying in the trade that "you must have the peanuts to get the elephants." In capital campaigns, the small gifts are necessary in order to attract the large ones, but a development director does well to make certain of the large gifts. There is a rough rule of thumb, often termed "the rule of three's," to the effect that one-third of most large capital funds comes in from three to five very large gifts, that another third comes in from 100 to 150 gifts of moderate size, say \$10,000 to \$100,000, and that the balance of the fund comes in all the rest of the gifts—all of smaller amounts.

*Institution's finances.* Paradoxical as it may seem, few pieces of fund rais-

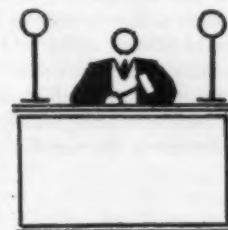
ing literature give any adequate statement of the institution's finances. Corporation annual reports are far ahead of reports from educational institutions on this point. Here is a subject on which college business officers can be of great service—the publication of easily understood financial statements.

*Board leadership* has an electric effect on a campaign. In the recent \$32,770,000 University of Chicago campaign every member of the board subscribed, for a total of \$4 million, before the campaign was announced. In the current Harvard campaign nearly \$11 million came in the early stages from the Harvard "family." Such unmistakable evidence that the responsible heads of a college or university mean business usually assures success from the start. #

## For Handbook on College Law

**T. E. BLACKWELL**

Educational Management Consultant  
Washington University, St. Louis



IN MARCH OF 1957, ARTHUR S. ADAMS, president of the American Council on Education, asked a group of college and university presidents, business officers, and professors of law to meet with him in Washington to consider the need for a handbook on college law for the use of those engaged in the administration of higher education.

The committee found that there was no publication in print or in preparation that would serve this purpose and there was unanimous agreement that a book in this area would be of great value to college administrators.

#### SEEK FOUNDATION GRANT

The executive committee of the American Council approved this report and authorized Dr. Adams to seek a foundation grant to finance the preparation and publication of the proposed volume. The following is an

excerpt from the proposal submitted with his request for the grant:

"The primary purpose of the book would be to give the college administrator an awareness and understanding of basic law and legal concepts as they relate to the college and to assist in planning procedures so as to avoid the possibility of litigation. The book would aim to give the administrator a sufficient grasp of basic legal principles of interest to the colleges, both public and private, so that he will recognize an incipient legal difficulty and know when to consult with his attorney rather than attempting to make him his own lawyer.

"The major emphasis of the volume would be upon the importance of reviewing day-by-day procedures to make certain that they include sound legal safeguards. The book will recommend and discuss effective prac-



tices relative to publication and revision of manuals of procedure for the guidance of each major college office. The book will discuss the effective use of the attorney charged with responsibility for the legal affairs of the institution.

"In dealing with the myriad aspects of college activities, the book will introduce the handling of legal reference material found in statute books, case books, and the files of the decisions and rules of administrative agencies of the government. The main framework of the volume will be built around an outline of legal principles and procedures: the law of contracts, the law of charities, the law of torts, the law of taxation, the law of copyrights and patents.

"Illustrative examples will be drawn throughout. For instance, the purchasing procedures should be standardized in detail in an office manual of purchasing. This manual and the purchase order forms of the institution should be reviewed by competent legal counsel before they are put into use. The institutional by-laws and regulations of the college should be clear and explicit with reference to the designation of officers authorized to execute contracts of purchase and of employment. Many unfortunate and costly misunderstandings can be avoided by restricting the number of indi-

viduals authorized by statute and by implication to enter into contractual relationships binding upon the institution. Such designated individuals should be familiar with the basic law of contracts.

"Pledge forms should also receive the attention of a lawyer. No restricted gift should be accepted for administration until its terms and conditions have been reviewed by responsible officers of the college. Once accepted, the terms and conditions of the gift cannot be modified by the college, even with the consent of the donor or at his request. Only a court of equity, exercising the right of 'cy pres,' can modify the terms and conditions of a charitable trust.

"Another vital area of administration is that concerned with the purchase of insurance. The officer charged with responsibility should be familiar with current legislation and regulations. The extent to which the college is liable for the negligence of its officers and employees will be discussed in the proposed volume. Workmen's compensation insurance and the laws relating thereto will also be covered.

"Many colleges, even the smaller ones, are now engaged in sponsored research. Research contracts and their many obligations call for special review and discussion. The need for a sound patent policy with reference to

the development of faculty inventions will be considered in some detail.

"A university with any publishing activity requires an administrator familiar with the law of copyright. Even the mimeographing of teaching and laboratory manuals, with quotations from other texts, may raise the question of the violation of the rights of publication.

"The law of taxation is becoming increasingly complex. Prospective donors expect college administrators to be able to advise them as to the tax implications of proposed gifts. The tax status of fellowship stipends, the salary of nonresident aliens, and room and board of resident employees will be explained. The taxation of college income from business activities and lease-back transactions will be one of the many topics for the proposed handbook."

#### GRANT FOR PREPARATION

Last May, Dr. Adams announced that the American Council had received a grant from the U.S. Steel Foundation in response to his request. This grant, together with an appropriation from the publication fund of the Council, will provide adequate financing for the preparation of this handbook and Dr. Adams requested me to begin work at once on the manuscript.

To assist me in this project, Dr. Adams has appointed the following committee:

Norman Auburn, president of the University of Akron; Howard Lowry, president of the College of Wooster; John Dale Russell, director of the newly established Center for Institutional Research at New York University; A. W. Peterson, vice president of the University of Wisconsin; Marcus Robbins, controller of Yale University; Ralph Fuchs, professor of law, Indiana University, and John MacDonald, professor of law, Cornell University.

However, if this proposed handbook is to be of maximum service to those who are to use it, I must have your help and advice. Will you please discuss this project with your president and your other associates, and send me your suggestions as to content and method of presentation? I should also like very much to hear from your legal counsel, especially if he is on a full-time or annual retainer basis. #

\*My address is 1215 Ocean Ave., Santa Monica, Calif.

## Food Service Institute

July 21 to 23

Hotel Knickerbocker

Chicago

LAST CALL to delegates planning to attend the 1958 College Food Service Institute July 21 to 23, under the sponsorship of COLLEGE AND UNIVERSITY BUSINESS in cooperation with Northwestern University and the University of Chicago. Please send tuition checks for \$17.50 to "Food Service Institute," in care of College and University Business, 919 North Michigan Avenue, Chicago 11, Ill.

Harold W. Herman, editor of COLLEGE AND UNIVERSITY BUSINESS, will make reservations for hotel accommodations for delegates at the Hotel Knickerbocker, Chicago, where all Food Service Institute sessions will be held. Delegates should advise him as to date and time of arrival so that hotel accommodations will be ready.



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## ELSIE dePONTE

*Director of Residence Halls and Food Service  
DePauw University, Greencastle, Ind.*

SEVERAL YEARS AGO WHEN OUR UNION Building at DePauw was a-building I spent considerable time gloating over the fact (as I thought) that never again would the food department of the residence halls be called upon to do any catering.

One day my judgment recovered its equilibrium, and I realized that no Union Building in a small or medium sized college should ever be built large enough or equipped in a manner to handle the larger luncheons or dinners that I presume every college or university, of necessity, must have two or three times a year. Hence, certain catering would probably always be the job of the residence hall's food department and such has been the case. Actually I am not sorry, for such service can have decided advantages to the department responsible for it, as I shall point out later.

In the past several years we of the residence hall food service department have served luncheons and dinners varying in size from 500 to 1000 people on an average of three or four times a year. We have worked out a system whereby it can be done without undue strain or confusion and the resulting luncheon or dinner can be one of which our university is proud.

At first glance, the problems seem enormous but to many of these difficulties the solution has been remarkably simple. Our only area large enough to serve as a dining room for a group of that size is the playing floor of the gymnasium. The food must be prepared in one or both of our residence hall kitchens, each of which is a good three blocks from the gymnasium—in opposite directions. The only equipment in the gymnasium is one cold water faucet and an elec-

tric warming oven of extremely ancient vintage. All other equipment must be taken with us.

As if these problems were not enough to strain our department to the breaking point, we have another: These affairs usually take place at a time when our dormitories are crowded with guests, too. (For example, on Dad's Day we urge Mother to come along, so while we are serving dads in the gymnasium, we have students plus their mothers back home in the residence halls!)

Needless to say, planning for these affairs begins well in advance of the scheduled date. First of all, as director of food service, I have a conference with the head of the office in charge of the affair (alumni office or development office). At this conference we decide just how we must manage the luncheon or dinner to co-

DePauw's gymnasium is converted to a dining room for special occasions, even though kitchens are remote.



## Waiters' Instructions for Luncheon

Luncheon: 12:00 Noon  
Waiters' report time: 11:20 a.m.

1 head table of 16  
42 tables of 14  
604 places total

### SETUP

On each table there should be:

- 1 sugar bowl
- 1 salt and pepper shaker
- place setting for 14 people including:
  - 1 fork
  - 1 knife
  - 1 teaspoon
  - 1 cup and saucer
  - 1 napkin
- Printed material
- 4 ash trays
- 1 jelly spoon
- 1 centerpiece of flowers

### DRESS

Waiters: Light shirt, tie, dark trousers, and jacket.  
Serving room women: White uniforms and hairnets.

### GENERAL RULES

1. Table assignments will be shown you. One waiter will be assigned to a table and you will work in pairs. On the far tables there will be three waiters to every two tables.

2. During the setup, use the small door to enter the dining room and the double door to return. During serving, reverse this procedure.

3. Set up the east side of the dining room with monogram dishes; the west side with maroon dishes. In setting up and serving, keep like dishes together. A place will be designated in the serving room for waiters from each side to pick up salads. Go to that place.

There will be four serving lines for hot food. Waiters from the east half go to lines Nos. 1 and 2; from the west half, to lines Nos. 3 and 4.

In clearing plates and salad plates, a location will be designated for unloading each kind of dish. Be sure you unload at the correct station.

In serving desserts, don't worry about keeping dishes matched.

### SETUP

1. First take out jelly dishes, placing them next to jelly spoons.

2. Next take relish plates and place them on the west half of the table; put cream pitcher next to sugar bowl.
3. Put salads at each place in usual position.
4. Now take the glasses filled with ice and water.

### SERVING

1. During time guests are entering the dining room, remain in serving room. When you go out the first serving trip, you will arrange in order in two lines with one junior head waiter leading each line.

2. On the first trip out every waiter will carry a tray with five plates. One of each pair will remain in the dining room to serve the plates. The other will return to the proper line in the serving room for more plates.

3. After all plates are served, come back for one roll basket and two coffee pitchers for each table.

4. Serve more water and seconds on rolls when necessary.

5. Clear service on signal from senior head waiter.

6. Clear plates on your signal from head waiter exactly as you usually do. These signals will be slightly staggered by rows so that scraping stations will be able to handle dishes satisfactorily. Be sure to unload soiled dishes at proper station in serving room.

7. All go out together again with the first desserts, eight on a tray. One of each team remains in the dining room to serve, the other one returns for the rest of the desserts.

8. After all desserts are served, serve seconds on coffee and return coffee pitchers to beverage room.

9. Remain in serving room, and at beginning of program stand in orderly group under balcony.

10. At end of program, while room is emptying, you can eat.

### CLEARING

1. Clear dessert plates and silver first to serving room.

2. Next clear cups and saucers and creamers to serving room.

3. Next clear water glasses to beverage room.

4. Clear salt shakers and sugar bowls to Table No. 39.

5. Put all centerpieces on Tables Nos. 38 and 41.

6. Roll all table cloths and put them on Table No. 42.

7. Stack tray stands near serving room door.

8. Check out with senior head waiter in order that we may have your time for payment. All time over the first hour will be paid at the rate of \$1 an hour.

Quad waiters turn in jackets to senior head waiter.

Longden waiters return jackets to Longden Hall.

ordinate it with other campus activities planned for that day. We agree on the method for obtaining the reservations and the date by which all reservations are to be received. Other departments whose services will be required are contacted and consulted.

Then, I am prepared to submit a menu that can be served well under the existing circumstances for the approval of the university officer in charge of the over-all planning for the day. At this time it is decided whether paper plates and cups or china and glassware are to be used. (We have stainless steel knives, forks and teaspoons which we only use in the gymnasium.) After all of these matters have been cleared, the food service director must be sure that all employees of the department are informed that an extra heavy work load will be necessary for the days involved

and that no days off will be given for a period of two or three days. This advance planning is done at least a month or six weeks before the scheduled event.

The next step in planning takes place as soon as the deadline for reservations is passed. From the reservations made we can pretty accurately determine the number of people we actually will be called upon to serve. Records kept over the years for any given event show the relationship of these two figures to be remarkably constant.

Now, equipped with the approved menu and the setup number, the food service director is ready to get down to detailed planning. Nothing is left to chance. Every detail in preparation and timing is written out and, after these details are checked with key employees, the entire staff is briefed in

staff meetings. In addition, written instructions are posted on the appropriate bulletin boards. At least three days before the event every cook, every dining room woman—in short every member of the permanent staff—knows exactly what she is to do and how and when she is to do it.

One of the staff of four head waiters is chosen by the director to head the affair. (This is considered quite an honor.) This head waiter is equipped with a set of detailed written waiters' instructions which the director carefully explains to him. He, in turn, briefs the entire waiting staff. The waiting staff from all four dining rooms is usually combined for these affairs. As service is essentially the same in all dining rooms during the year, and as all waiters have had thorough instructions in the fall in a required class conducted by the direc-



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tor, the four groups are easily combined into a coordinated whole with the minimum of effort.

Twenty-four hours before the scheduled event the parts of the gymnasium needed are made available to us. The maintenance department puts down the cover over the playing floor and sets up the trestle tables and the chairs according to a floor plan furnished by the food service director.

A small room adjoining the large room is set up as a serving room for the making of the individual salads and the serving of plates. In this room

we have the electric warmer, tables around the edge of the room, and through the center two or three serving lines. Another adjoining small room is set up as a beverage service room for water and coffee or iced tea.

The trestle tables in the dining room are covered with white paper. After the maintenance department has finished, the dining room women put on the white linen tablecloths (left over from the days when we used linens in our regular dining rooms) and set up the tables with the flatware, service silver, glasses, sugar (we usually use

the individual packets) and napkins. While this has been going on in the gymnasium, the kitchens have been busy doing all the preparation that can be done the day before for both the special menu and the regular menus to be served in the residence halls.

When the day arrives the manager has little to do except be available to answer questions that may arise and to see that the time schedule is being rigidly adhered to. Remember, at the gymnasium there is no refrigeration and few warming facilities, so the food department truck must arrive with the food very close to the time it is to be used, and the kitchen, in turn, must have every item ready to go at the exact time planned.

Usually all goes like clockwork, but the director is wise to have in mind some alternatives in case of emergency. For example, we always borrow an extra truck from another department and have it available in case our own fails to function or should get behind schedule. During the short time that our food truck is running on a very close schedule, the street from the kitchen to the gymnasium is blocked to other traffic with the cooperation of the city police.

When it is time for the guests to enter the gymnasium, what used to be a playing floor looks remarkably like a dining room. Bunting in appropriate colors around the walls, flower centerpieces at regular intervals, and colorful salads and relish plates on the tables have done much to effect the transformation. Waiters in their "uniform" of dark trousers, white shirt, tie and white waiter's jacket are stationed at strategic spots to act as ushers for the guests. As the guests are seated, the waiters go back to the serving room. When about 50 of them return in a double line down the center aisle, each with his tray up on his left shoulder, and then fan out over this large dining room, they make an impressive sight. In this manner we have put out as many as 800 plates in 11 minutes, so the actual serving need not require any great length of time. On some occasions we clear dinner plates before serving the desserts. On other occasions when the time element is important we serve the desserts without clearing dinner plates.

The next operation, almost as important as the actual serving of the meal, is the clean-up. At the same time the employees were briefed for the



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serving of the meal they were briefed for the clean-up operation. While the meal is still in progress, the food truck can start taking back empty utensils. After the food service is completed, left-over food is returned to the kitchen to refrigeration at once.

The order of clearing for the waiters is arranged in a manner that makes the loss of flatware almost an impossibility. Soiled dishes and silver are returned to the dishwashing machines in the residence halls and previously selected student employees are sent back to start washing them while the

rest of the student waiters are still clearing the dining room. A maintenance department truck is parked outside the service entrance to the gymnasium, and waiters deposit waste-paper directly into it. Within 20 or 30 minutes after the guests have left the dining room, the maintenance department is engaged in taking down the tables.

A few important tasks, however, remain for the food service director to perform. An evaluation of the operation is made in conjunction with other interested university officers.

This evaluation, along with suggestions for improvement "the next time," is included in the file in a folder devoted to this particular event. Also included in the folder are copies of the dining room floor plan used, plus copies of all instructions issued to employees. The information in this folder can be a great help when a similar event takes place at some future date.

Another task that remains is one that can be done only by the food service director personally. This is the expression of her honest, personal appreciation to the employees, either individually or in groups, for a day's work well done and for completion of a successful operation. Other university officers such as the president, alumni officer, and development officer have been most thoughtful in sending letters of appreciation to the food service department after such events, and these are decided morale builders.

It is not our policy to call in extra employees for these events, as we have found that such "strangers" slow up the operation simply because they are not familiar with our methods or our plant. Therefore, the secret of getting the work done lies in planning menus and procedures in such a way that the regular employees can do it all.

In view of this fact, a natural question is: How can this special event be served without undue slighting of the regular dining rooms? Naturally, only a skeleton staff can be allocated to the regular dining rooms at that time, and the menu must be simple, both in preparation and service. No complaint from this procedure has been received from any of our residents because well in advance of the time the director explains to each living group just what to expect and why. It has been our experience that our resident groups take pride in the fact that the staff ordinarily allocated to them has been called upon to cater a university function.

In the past few years we have catered functions honoring several distinguished persons, including Vice President Richard M. Nixon. An event such as this can bring advantageous results to any food service department, the most important of which is the molding of the entire staff into a smoothly operating whole with a justifiable pride in the accomplishment of a successful operation and with a real sense of being an important part of an organization worthy of distinguished guests. #



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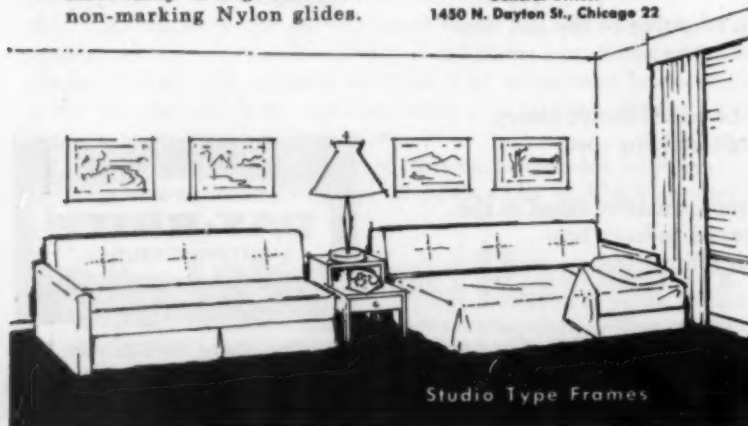
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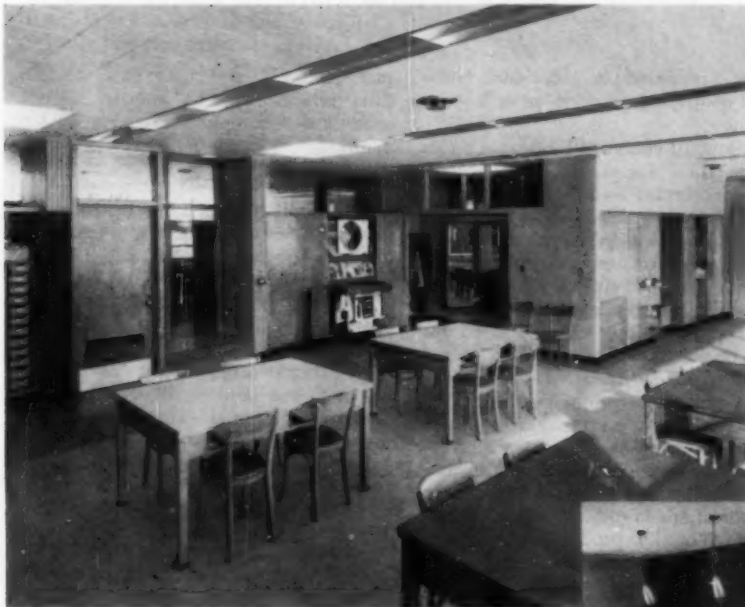
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# How to Make the Most of Fabricated Foods

A revolution in the food preparation and processing industry is just around the corner, but it will arrive sooner if food processors, manufacturers and consumers work together to develop the most satisfactory products

LENDAL H. KOTSCHVAR

Director of Food Services, Montana State University, Missoula

WITHIN THE NEXT SEVERAL DECADES institutional food preparation will undergo a major revolution. Convenience foods, automation and other improved equipment will be major factors in bringing this about.

The speed with which this revolution occurs will depend largely upon how well industry and food services work together. In some instances industry has already outstripped current demands of food services and is producing items which food services could use to great advantage; however, because of reluctance to try new ideas food services have sometimes been unwilling to accept these improved products or equipment. This is not unusual, and manufacturers should realize that there is always a reluctance to give up a tried and proved method for a new product and there will always be inertia to overcome.

## MISINTERPRETING MARKET COSTLY

In other instances industry has produced equipment and foods which have not been successful either because industry has misinterpreted the need for such items or because the product has lacked quality as one of its factors. Misinterpreting the market in this manner is costly to a manufacturer and leads frequently to his reluctance to try new things again. Greater care in determining both the need for the product and the quality required would eliminate some of the hazard.

There is an increasing need today for food services and industry to work together toward the common goal of bringing the full advantages inherent in automation and convenience foods more rapidly into the food service industry.

This need for cooperative effort is well illustrated in the hesitant acceptance in many markets of fabricated

meat (prepared in individual cuts—well controlled portions—prior to marketing).

About 10 years ago fabricated meats made their appearance and acceptance in certain areas was fairly rapid up to a point. The idea was a good one, aiding as it did management control of portions and costs in the institution. Labor savings could be made through utilization of mass production methods, and the lessened need for supervision of skilled butchers was a relief to management. However, the meat processors producing fabricated meats made several mistakes. They failed to study the market closely.

In the first place, they did not realize the need for well written specifications in order to assure standard high quality products in purchase. This allowed inefficient meat processors to enter the market and sell fabricated meats of low quality. The market would have been much more efficiently and rapidly developed had manufacturers realized the need to work closely with institutions and assist them in developing adequate specifications to guarantee quality and the meat cut desired.

## FAILED TO INVESTIGATE

Another error on the part of both food services and processors of fabricated meats was the failure to make investigations which actually proved the savings that could be made. Only recently has it been known that the cost of cutting out meat products from wholesale cuts or carcass is approximately 8 cents per pound in the institution. Furthermore, the extent of trim and bone wastes in processing meats was not well known. Cooperative efforts on the part of food operators and industry in making these tests prior to introduction of product would have opened the way for a wider acceptance of these meats;

manufacturers and operators would thus have been better able to determine how maximum savings could be made.

## LACKED INFORMATION

If information such as the following had been available to purchasers, much of the reluctance to use a new product would have been overcome:

"Fresh liver was skinned, deveined, the gristle removed, and then cut into 4 ounce portion slices by a skilled meat cutter in a restaurant. The waste was between 10 and 15 per cent on each liver prepared. The variation in size and shape of the liver slices was noticeable, with weight variations over or under the average of 4 ounces being frequently greater than half an ounce. Eighteen minutes were required to process an 8½ pound liver or approximately 2½ minutes per pound. At a cost of \$2.50 per hour for the skilled meat cutter, the cost per pound was increased 10% cents. Trim loss ran an average of 12 per cent or 3½ cents per pound. The original price of the liver was 31 cents per pound. The final pan-ready cost was 45 cents per pound. Fabricated liver could be purchased for 40 cents per pound with weight variations for each individual portion over 4 ounces not being greater than one-quarter ounce."

Food service operators themselves should have made more such investigations or cutting tests in their own operations to gain this information. If they lack such information and note that the price per pound of the fabricated item is considerably higher than that of the wholesale cut or carcass price paid, they quite naturally refuse to purchase the fabricated item. Information contained in the accompanying table has only recently become available to institutions. Much more information of this nature is



desirable if operators are to be able to calculate the savings possible by purchase of fabricated meats.

Another factor which led to reluctance in accepting fabricated meats was that many processors were freezing their products and then shipping them. The advantage was obvious. Freezing meant that large meat packers located near primary cattle markets could not only process the carcass or wholesale cut but could fabricate it as well and then freeze it. Mass production methods were possible because of the large volume involved. However, too frequently improper or slow freezing methods were used to freeze the meats and the resultant coarse crystalline structure of the meat destroyed texture and flavor.

Little knowledge was available, too, on the proper way to cook frozen meats. For the most part meats were allowed to thaw and then were cooked. Large losses from drip in thawing occurred with a resultant loss of flavor and moisture. Therefore, operators were reluctant to use such products.

Research done by me and others indicated, however, that flavor differences and improved moistness would result when the cooking process began while the meat was still frozen. Meat companies, however, were slow to get this information out to clients using frozen fabricated meat. The fact is that even today reliable organizations representing the meat industry state in their instructions for cooking frozen meat that there is no appreciable difference in the taste of meat cooked with or without preliminary thawing. This results in poor products which hurt sales. More and more sound information is now reaching consumers, however, and, at present, virtually every major packing house producing frozen fabricated meat advises that cooking begin at the frozen state.

#### COOKING METHODS VARY LITTLE

Cooking methods and degrees of doneness for frozen meats vary little from those for the unfrozen or "fresh." The greatest difference is in cooking time interval. However, some changes in method can reduce cooking time. Hard-frozen roasts require approximately one-third to a half extension of total cooking time beyond that required per pound for fresh roasts. I have suggested that cooking time can be shortened if frozen meats are allowed to thaw until they reach the crystalline stage in defrosting and then are cooked. This will considerably shorten cooking time without a heavy drip loss occurring. It should be stressed that severe drip losses occur when meats thaw *beyond* the crystalline stage and are completely defrosted prior to cooking.

#### Per Cent Yields of Fabricated Items From Wholesale Cuts

Item	% Yield	Wholesale Cut Used
Tenderloin steaks	54	Tenderloin, untrimmed
Boneless strip steaks	48	Bone-in strip
Strip sirloin club steaks	63	Bone-in strip
Sirloin top butt steaks	33	Full bone-in strip
Boneless rib steaks	29	Standing rib
Boneless sirloin top butt steaks	30	Full boneless butt
T-bone steaks	41	Pinbone sirloin
Pork loin cutlets	10	Full loin
Pork tenderloin steaks	76	Whole pork tenderloin
Center cut pork chops, bone in	38	Light, lean 12/16 lb. loins
Semi-center cut pork chops, bone in	68	Light, lean 8/10 lb. loins
Center cut ham steaks, bone in	26	Whole hams
Center cut ham steaks, boneless	76	Boned hams
Ham steaks, end cut	33	Ham butt and shank ends
Fresh ham	76	Bone-in hams
Pork loin	57	Whole bone-in loin
Beef chuck eye	14	Bone-in chuck
Beef shoulder clod	18	Bone-in chuck
Beef top round	28	Straight round
Lamb leg, bone in	71	Straight leg
Lamb leg, boneless	65	Straight leg
Lamb shoulder, boneless	67	Bone-in shoulder
Veal leg, bone in	75	Bone-in leg
Veal leg, boneless	68	Straight leg
Veal shoulder, boneless	60	Bone-in shoulder
Broilers, 12 to 24 oz.	67	N. Y. dressed
Fryers, 1½ to 2½ lbs.	67	N. Y. dressed
Fowl, 2 to 3¼ lbs.	67	N. Y. dressed
Ducks, 3½ to 5 lbs.	70	N. Y. dressed
Turkeys, 9 to 18 lbs.	75	N. Y. dressed
Geese, approximately 10 lbs.	70	N. Y. dressed
Cod fillets	33	Whole cod
Flounder fillets	25	Whole flounder
Haddock fillets	33	Whole haddock
Halibut fillets and steaks, trimmed	43	Whole halibut
Lobster meat	38	Whole eastern lobsters
Red perch fillets	20	Whole red perch
Swordfish steaks	80	Whole swordfish

Research by one major meat packer has indicated that thin hard-frozen steaks could be treated much like fresh steaks in broiling. Thicker steaks, however, were found to be better flavored and juicier if the broiling rack was lowered until thawing was almost complete and the rack then raised to a normal level to complete broiling.

This same meat packer also advised the complete thawing, before broiling, of steaks thicker than 2 inches. I have found, however, that if steaks 2 inches thick or more are thawed by being immersed in hot fat until only a small core of frozen material remains in the center and then are treated as a fresh product for the remaining part of the cooking period, a successful, highly flavored product is obtained. Formation of a hard crust is avoided and broiling losses are much the same as for fresh steaks. This method of cookery can also be used for even thinner products in order to reduce cooking time.

Certainly the use of fabricated meats would have been expedited had industry and food services cooperated in the development of the market, and the interests of both would have been furthered. Today precooked frozen foods and many other new products are finding slow acceptance because manufacturers and users did not get together in the original product development.

#### NEED FOR COOPERATION

Food operators certainly should not leave to manufacturers alone the responsibility for testing and proving a product. Greater cooperation would benefit both by the development of better products. Manufacturers, however, should realize that the testing and use of a product may be difficult to do in an operation whose main purpose is to operate at a profit. Cooperation in defraying costs of such testing will encourage more and more operators to test products for the market.

#

# HOW TO FLUFF A SPEECH

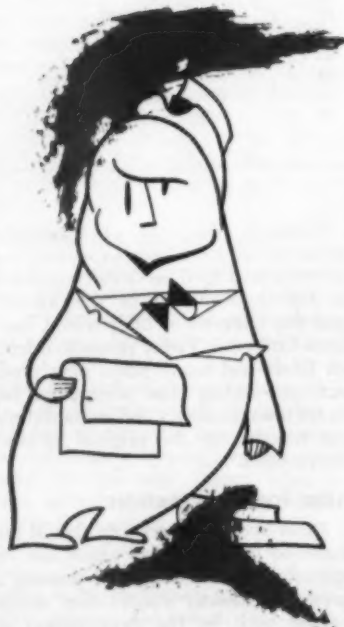
Drawings by A. HORMEL

EVER SINCE DEMOSTHENES took the pebbles out of his mouth and climbed up on his soap box, men have been writing and discussing the rules and techniques of effective public speaking. The simple guides outlined below, distilled from centuries of study of the art of oratory, will help any manager toward self-improvement in this vital field. And—perhaps most important of all—the executive who applies them conscientiously will soon find his invitations to speak becoming few and far between, thus keeping his evenings free for less demanding pastimes.

Reprinted from The Management Review, American Management Association, 1961.

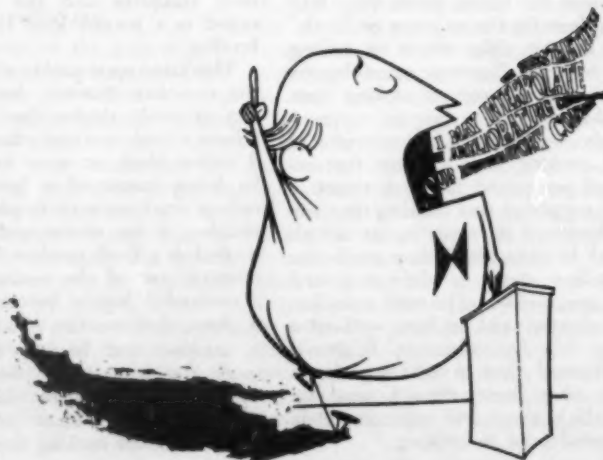


**Humble Pie.** Demonstrate your humility by pointing out your lack of qualifications and naming several persons in the audience who could speak more intelligently on the subject. Your speech will never disappoint the audience if they've decided from the start that it isn't worth listening to.



**One for the Podium.** Coffee is for weaklings . . . a little Dutch courage helps make any speech livelier.

**Sound Without Sense.** Throw in all the big words and technical terms you can find. Phrases like "the ineluctable modality of the polyphonic" add class to the act. Don't worry about meaning; after the first few sentences, no one will be listening, anyway.

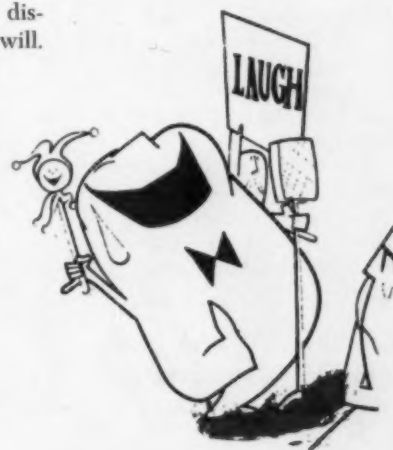


**Flexible Flier.** Don't bother to find out anything about the group you're addressing; it might involve extra work to tailor your standard talk to fit their interests. What if you don't make it quite clear whether you're speaking to the Needlepoint Guild or the League of Women Voters? *They* know who they are, don't they?



**Full Treatment.** The only way to let them know you're an expert is to tell them everything you know. Your subject may not be exhausted after a two-hour dissertation, but your audience will.

**That Was No Lady.** When you tell a joke, be sure it's an old chestnut from Joe Miller's Joke Book or some other time-honored source. This will avoid making unreasonable demands on the attention of your audience. If it's totally unrelated to the subject at hand, so much the better.



**Cliché Expert.** If your business has expanded, don't just say so—the accepted phrase is "Like Topsy, it 'just grewed.'" Intuitive action, remember, is best described as "flying by the seat of our pants." And when you talk about "treating the worker as an individual," always be sure to refer him as "Joe Doakes."

**Gentle Reader.** Read every word of your speech from a prepared script. This will protect you from making any errors in delivery, as well as ensuring that your listeners won't be paying enough attention to catch any mistakes that do slip through. Be sure to glance up every ten or fifteen minutes, however, so you can stop reading when the last of the audience leaves.



# NEWS

**N.E.A. Reports Median Salary of \$6015 for College Teachers . . . Court Order Ends Restrictions at University of Florida . . . Lake Forest Faculty Gets 24 per Cent Pay Raise . . . Alumni Council Establishes Incentive Awards**

## Establish Five Donner Science Professorships

PHILADELPHIA.—The Donner Foundation recently announced that grants totaling \$2½ million will be made to five eastern universities, each of which would establish a Donner professorship in science.

The institutions selected are the University of Pennsylvania, Massachusetts Institute of Technology, Harvard University, Yale University, and Princeton University.

According to the proposal, each institution will receive a grant of \$500,000, income from which will pay an annual salary of approximately \$20,000 to the professor holding the new chair.

## Combine TV and Radio Into One Department

EAST LANSING, MICH.—Operations of Michigan State University stations WKAR-TV and WKAR-Radio were combined July 1 into a radio-television department.

Dr. Armand L. Hunter, director of WKAR-TV, heads the new department with the title of director of broadcasting.

Robert J. Coleman, who has been director of WKAR-Radio since 1934, retired June 30. Serving as manager of the radio station in the new department will be Lawrence T. Frymire, who has been assistant director of WKAR-Radio since Oct. 1, 1952.

## Four-Year Scholarship Prize in Sales Contest

NEW YORK.—The emerging stature of education has been spotlighted with an announcement that a four-year college scholarship has been selected as the top award in a business sales incentive contest.

Carrier Corporation has set up a \$10,000 trust fund for a four-year

### INDEX TO VOLUME 24

The index to the first six issues of this year's **COLLEGE AND UNIVERSITY BUSINESS** (January through June 1958) has been printed separately. Send a note or postcard for your complimentary copy. Printed copies of the index for Volume 23 (July through December 1957) still are available. Those persons who have previously written for the index to Volume 23 (July through December 1957) will be sent the latest index without further correspondence.

college scholarship as top award for a competition among the retail salesmen for its ice making equipment. Ice makers are sold to hotels, restaurants and institutional establishments.

Not only tuition, but room, board, books and social expenses are covered. The winning salesman can name any child, of any age, and for any college.

## Median Salary of \$6015 for College Teachers Reported by N.E.A. in New Study for 1957-58

WASHINGTON, D.C.—College and university teachers dwell in a perpetual salary recession with half of them earning less than \$6015 annually—only \$772 above the median salary of two years ago—the National Education Association reported in a new study released recently.

College instructors—the beginners who usually have the largest classes—have a median salary of only \$4562, just about equaling the average public school teacher's salary.

These facts are reported in the N.E.A. Research Division's study titled "Salaries Paid and Salary Practices in Universities, Colleges, and Junior Colleges, 1957-58." Almost 77 per cent of the nation's degree granting institutions participated in the study.

## Florida Court Order Ends Restrictions

TALLAHASSEE, FLA.—As the result of a federal district court order, the University of Florida graduate schools are being opened to qualified Negroes. Judge Dozier Devane enjoined the board of control from enforcing any policy, custom or usage in the graduate schools that restricted admissions to white persons only.

The court's action was the climax of a nine-year legal fight by the National Association for the Advancement of Colored People to break down racial barriers at the institution.

The court order applied only to the University of Florida at Gainesville. Ralph E. Odum, assistant attorney general, states that a separate suit will have to be brought to open the doors of Florida State University, the state's other white university, to Negroes unless the board of control decides to do so.

Here are the highlights from the N.E.A. college salary study:

In gross figures here are the 1957-58 median salaries for professors and the two-year percentage increase in salaries.

RANK	% INCREASE (2 years)	MEDIAN (Annually)
Professor	14.1	\$8072
Associate	14.5	\$6563
Assistant	13.7	\$5395
Instructor	11.6	\$4562

A teacher's rank is a major salary determining factor, but *where* a teacher works, be it a state university or a small liberal arts college, also influences his salary to a great extent.

Summarized here are the 1957-58 median salaries for all teaching ranks combined and the percentage increases





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in pay in the last two years, compiled by type of institution:

TYPE	% INCREASE (2 years)	MEDIAN (Annually)
State univ.	12.8	\$6370
Land-grant	13.4	\$6188
Nonpublic univ.	10.6	\$6176
Teachers col.	12.7	\$6086
State col.	17.8	\$5882
Large nonpublic	12.4	\$5344
Medium nonpublic (500-999 students)	15.6	\$5099
Small nonpublic (under 500)	13.0	\$4610

Salaries vary greatly for college teachers. Only about 1 per cent earn more than \$13,000 annually and about 1 per cent earn less than \$3200 annually, but the remainder are scattered widely all along the scale.

College professors don't have an easy time picking up additional money through summer teaching, especially if they are in the liberal arts in a small college. Although almost 82 per cent of the reporting colleges do have summer programs, only one in 25 offers summer employment for all its teachers. Only about one-fourth can employ as many as three-fourths of their complete teaching staffs for the summer. Almost one-half of the reporting small liberal arts colleges—those that pay their teachers the least—have no summer programs at all.

Summer session teachers also are often paid at a lower rate than that in effect during the regular school year. As many as 44 per cent of the institutions having summer sessions pay at a lower rate for summer teaching.

Since public school teachers who take many professional courses make up a large part of the summer student body, this means that the departments offering professional courses are most likely to be operating at closest to full strength for the summer.

Top junior college teacher salaries are paid in the Far West (median of \$6774 annually), but the national median for public junior college teaching salaries is \$6271. In New England it is \$4800 and in the Southeast it is \$4282. Nonpublic junior colleges pay considerably less and have a national salary median of \$4016.

Salary schedules with stated annual increments—used in almost all U.S. public schools—are not common in colleges and universities. Two of every three reporting institutions do have salary schedules, but a majority of these say they do not designate specific annual increments. Most college salary schedules do apply uniformly to all departments, however.

## Pay Raise of 24 per Cent for Lake Forest Faculty

LAKE FOREST, Ill.—A 24 per cent increase in faculty salaries at Lake Forest College was announced June 12 by President Ernest A. Johnson. "The new salary levels, which became effective July 1, will be among the highest in the nation," Dr. Johnson asserted.

The new schedule follows increases of approximately 10 per cent that have been granted faculty members over the last three years.

In a news conference at the University Club in Chicago, Dr. Johnson declared: "We are interested in building a great college, not just a good one. We want to make Lake Forest the most distinctive college in the Midwest. To do this, we must have a great faculty, which means good salaries. In the future there will be great competition for professors. The bottleneck in education will be brains, not mortar."

Under the new plan, the average salaries will be \$9838 for full professors, \$7480 for associate professors, \$6688 for assistant professors, and \$5400 for instructors. The salaries are averaged on the basis of a 10 month academic year.

A possibility exists for faculty members to earn an additional \$1000 to \$2000 if they teach in the evening division or at the summer session.

A large share of the expense of the new salary schedule will be borne by an increase in tuition fees. Beginning in September, tuition for day students will increase from \$700 to \$850 annually. For a resident student, covering room, board and tuition, the increase will be from \$1400 to \$1550.

## Plan New College for Massachusetts

AMHERST, MASS.—The Fund for the Advancement of Education has given a grant of \$20,000 to a committee of professors from four Massachusetts colleges so that they may develop plans for a new experimental college in the area.

Members of the cooperative committee are Dr. Hannon McCune, provost of the University of Massachusetts (chairman), Donald Sheehan of Smith, Stuart M. Stoke of Mount Holyoke, and Cesar L. Barber of Amherst.

The committee's objective is to produce "education of the highest quality

at a minimum cost per student and with as small a faculty relative to the size of the student body as new methods of instruction and new administrative procedures can make possible."

## More Than \$832 Million Received by 904 Colleges

WASHINGTON, D.C.—The survey of voluntary support for America's colleges and universities sponsored by the American Alumni Council, A.C.P.R.A. and the Council for Financial Aid to Education has been completed.

The records show that 904 institutions, including 138 junior colleges, received a grand total of \$832,937,123 during 1956-57. Responding to the questionnaires were 1040 institutions. Usable completed returns came from 904 schools. (Six questionnaires were too late to be included in anything but the over-all total.)

Omitting the Ford grants, 772 four-year institutions received \$622,644,391 during 1956-57. The increase in grand totals from 1954-55 to 1956-57 is 147.9 per cent. For four-year colleges it is 85.29 per cent.

Sources of support and the percentage increase over 1954-55 are as follows:

SOURCES	AMOUNT	% INCREASE
Corporations	\$ 76,897,762	95
Religious denominations	78,100,606	82
Governing boards	29,400,237	205
Alumni	62,654,683	20
Other individuals	52,507,574	70
General welfare foundations	319,085,152	535
Nonalumni, nonchurch groups	37,497,821	101
Government	53,691,505	80
Bequests	74,274,211	108
Trusts, annuities, life contracts	16,068,775	42
Other sources	17,199,691	13

Another highlight of the survey is that slightly more than one-third of the gifts for current operations have been made for unrestricted or general purposes as compared with 29 per cent in 1954-55.

More than half of the grand total has been for faculty and staff compensation and for unrestricted or general purposes; 29 per cent has gone for faculty salaries, enhanced greatly by the Ford gifts, and 24 per cent is unrestricted.

Four of the major universities—Yale, Harvard, Stanford and Johns Hopkins—have received more than \$20 million. Thirty-seven in the group of 65 major universities have received more than \$3 million.

## Alumni Council Offers Incentive Awards

WASHINGTON, D.C.—In a move designed to broaden the base of financial support for higher education, the American Alumni Council has established the Alumni Incentive Awards Program, financed initially by a grant from the U.S. Steel Foundation.

Under the program, recognition and cash awards, including a top prize of \$10,000, will go to the colleges and universities selected by a panel of judges as those that have demonstrated notable success or improvement in obtaining financial support from alumni.

Criteria that will serve as guides to the judges in making their selections will include the amount of funds raised from graduates and former students, percentage of alumni contributing, objectives, size of average gift, improvement over the previous year's record, and additional evidence of a planned effort to broaden the base of support.

The first group of prizes under the Alumni Incentives Award Program will cover alumni fund raising efforts in 1957-58.

Eight classifications have been established for the program, with \$1000 awards and certificates going to the leading institution in each group. The classifications are: private universities (with three or more professional schools); private men's colleges; private women's colleges; private coeducational colleges with less than 750 enrollment; larger private coeducational colleges; tax supported universities and colleges; professional schools, and junior colleges. The \$10,000 award will go to the one institution rated as the leader of all classifications.

The program is designed to provide an added incentive both to the alumni whose support is sought and to the institutions and their formal alumni organizations seeking that support. The cash prizes will be presented to the presidents of the winning colleges and universities to be used in furthering the best interests of the alumni and educational fund raising programs of their institutions.

## Temple Raises Fees

PHILADELPHIA.—Officials of Temple University announced recently that tuition rates will be increased from \$75 to \$129 a year to help pay faculty salaries.



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## Parents of Columbia Students Now Pay Less

NEW YORK.—Dad's wallet isn't being tapped as mercilessly for his son's college expenses as it once was, according to a survey conducted by two Columbia College students as part of an economic statistics course.

Questioning 300 of the 600 graduating seniors of the class of 1958, the students learned that only 36.3 per cent of college costs were contributed by the families of Columbia College men. In contrast to that figure,

fully 41.9 per cent of costs were paid by scholarship grants.

The student himself helped foot the bill, paying off 21.8 per cent of it through part-time employment.

Authors of the study are John E. Muehlig of Winchester, Mass., and Ronald T. Martin of New York. They also learned that 75 per cent of the class of 1958 plans to do graduate study, with 5 per cent undecided. This statement of intentions coincides with the performance of previous Columbia College classes, wherein three-fourths of the men have gone on to

study in the arts and sciences, the professions, and business.

## \$15 Million Given to Yale for Expansion

NEW HAVEN, CONN.—President A. Whitney Griswold announced at commencement time that Yale has received a \$15 million gift for two residential colleges and an expanded program of undergraduate seminars.

The donor is the Old Dominion Foundation, established by Paul Mellon, a member of the class of 1929. Mr. Mellon, a benefactor of Yale University for many years, is a son of the late Andrew W. Mellon, one-time Secretary of the Treasury.

In announcing the gift, Dr. Griswold stated: "It will permit a further modest increase in the number of undergraduates we can admit to Yale. These measures will greatly strengthen the residential college system whose central purpose is to preserve education as an individual experience in times and circumstances increasingly inimical to that goal."

The gift represents the first step toward Yale University's 10 year goal of \$140 million in new capital funds for educational purposes. It is hoped that \$69 million can be raised within five years.

## Michigan Making Plans for Full-Year Operation

ANN ARBOR, MICH.—Tentative recommendations for successive changes in the University of Michigan calendar, so as to permit full-year operation by 1964, have been placed in the hands of President Harlan Hatcher.

Final recommendations will come from a study committee after there has been an opportunity to receive reactions from the faculty, student body, and community. The committee, appointed by the president, has been at work since January.

The committee's tentative recommendations for changes to be considered prior to beginning full-year operation are, in part, as follows:

1. An advance orientation program would be started as soon as possible. Instead of devoting a week to acquainting new students with the campus, there would be an individualized orientation program for new students.

2. Registration for each new semester would be completed in advance.

3. Semesters would include 15 weeks of classes, exclusive of vaca-

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tions and of the examination period, while the two-semester plan remains in effect.

## U.S. Steel Grants for 1958 Total \$2 Million

NEW YORK. — Roger M. Blough, chairman of the board of trustees of the U.S. Steel Foundation, recently reported that grants totaling \$2 million have been awarded to 655 institutions of higher education and to several educational organizations.

The grants were made to privately supported liberal arts colleges, science and engineering institutes, public and private universities and medical schools, and to educational associations in that field.

### NAMES IN THE NEWS

J. B. McKee Arthur Jr., formerly director of development for the school of general studies at Columbia University, has been named executive director of the Empire State Foundation of Independent Liberal Arts Colleges, Dr. Louis J. Long, chairman of the foundation's board and president of Wells College, announces.

Lloyd H. Elliott, formerly executive assistant to the president of Cornell University, Ithaca, N.Y., has been named president of the University of Maine, Orono.

Robert W. Fenix, controller of Occidental College in Los Angeles and former financial vice president at Willamette University, Salem, Ore.,



Robert W. Fenix

has been named controller of the University of Chattanooga, Chattanooga, Tenn. He will assume his new duties on September 1. S. F. Bretscke, business manager of the University of Chattanooga since 1934, will continue as vice president, assisting with the university's finances, particularly the \$5 million development program.

Henry F. Rossi, registrar at New York University, will become registrar at St. John's University, Brooklyn, N.Y., in August.

Dr. Simon Greenberg, vice chancellor of the Jewish Theological Seminary of America, New York City, has been named president of the University of Judaism at Los Angeles. The university is a branch of the seminary.

Dr. John Summerskill, a member of the faculty of Cornell University, Ith-

aca, N.Y., became vice president of student affairs on July 1.

Theodore W. Biddle, dean of men at the University of Pittsburgh, has been named president of Johnstown College, which is affiliated with the University of Pittsburgh and until recently was known as Johnstown Center.

Dr. Willis J. Winn, professor of finance in the Wharton School of Finance and Commerce, University of Pennsylvania, became dean of the school and a vice president of the university on July 1.

Richard N. Bluestein, assistant to the president at Hebrew Union College, Cincinnati, has been appointed assistant to the president of Brandeis University, Waltham, Mass.

Eugene E. Cohen, formerly controller and assistant treasurer of the University of Miami, Coral Gables, Fla., has been promoted to the post of vice president and treasurer of the university.

L. D. Crooks, formerly chief accountant at the Medical College of Virginia, Richmond, has been named treasurer of the institution to succeed

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the late F. Lee Spencer, who died March 9.



James M. Hester

**Dr. James M. Hester**, provost of the Brooklyn Center of Long Island University, has been appointed to the newly created position of vice president of Long Island University. He takes office on August 1.

**Robert O. Hall**, head of the department of cinema at the University of Southern California, Los Angeles, has been appointed program associate of the Educational Television and Radio Center, Ann Arbor, Mich. He took over his new duties on July 1. He is on a one-year leave of absence from the University of Southern California.

**William F. Trask**, former advertising manager of the *Addison County Independent*, a newspaper at Middlebury, Vt., is now director of placement at Worcester Polytechnic Institute, Worcester, Mass.

**Norman J. Taylor** has been appointed to the staff of Purdue University as a buyer of electronic supplies

and equipment, books, periodicals, aviation supplies and equipment. He succeeds **C. L. Smith**, who resigned to become assistant purchasing agent at Emory University in Georgia.

**Robert E. Heywood**, controller of Wayland Academy, Beaver Dam, Wis., since 1956, is the new assistant treasurer of the University of Massachusetts at Amherst. As assistant to the treasurer, **Kenneth W. Johnson**, Mr. Heywood will supervise the receipts and disbursements operation, currently approaching \$12 million a year. He will also supervise the administration of scholarships, student aid, and foundation grants.

**Leo Hill**, city manager of Columbia, Mo., has been named business manager of the University of Colorado, Boulder. His appointment becomes effective on August 1, when he will succeed **Willard W. Bray**, recently made controller and treasurer.

**Kenneth G. Richardson** will succeed **Dale W. Hartford** as assistant director



Leo Hill

of public relations at Trinity College, Hartford, Conn., on August 1. Mr. Hartford has held the public relations post for three years.

**Earl W. Holder**

, business assistant to the president of Pasadena City College, Pasadena, Calif., was recently honored by the National Association of College Stores as founder of the self-service college store idea. Self-service college stores are available to more than half of all college students, according to a recent survey made by the national association.

**Dr. K. Ronald Bergethon**, dean of the college at Brown University, Providence, R.I., is the new president of Lafayette College, Easton, Pa. Dr. Bergethon succeeds **Dr. Ralph Cooper Hutchison**, who had resigned in June 1957.

**Dr. Norman H. Topping**, vice president of the University of Pennsylvania, has been appointed president of the University of Southern California. Dr. Topping's appointment will become effective September 1. **Dr. Fred Fagg** retired in July of last year after having served as president of the university for 10 years.

**Dr. Jack J. Early** resigned recently as dean of Iowa Wesleyan College, Mount Pleasant, to accept the presidency of Dakota Wesleyan University, Mitchell, S.D.

**John R. Howard**, business manager of Lake Forest College, Lake Forest, Ill., has been appointed a vice president of the college.

**John G. Andersen**, superintendent of buildings and grounds at Lake Forest College, Lake Forest, Ill., has been named director of physical plant planning. In this capacity Mr. Andersen will coordinate the planning of new buildings. **Walter W. Gerichs** has been made trust and investment officer, in addition to his responsibility as veterans contact officer at the college. Mr. Gerichs was formerly office manager, a position now held by **Mrs. Paul V. Lahman**.

**Dr. Umphrey Lee**, 65, chancellor emeritus of Southern Methodist University, Dallas, Tex., died suddenly June 23. Dr. Lee became president of the university in 1938 and resigned because of illness in 1954.



Earl W. Holder

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## DIRECTORY OF ASSOCIATIONS

### National Federation of College and University Business Officers Associations

President: C. O. Emmerich, Emory University; vice president: Kurt Hertzfeld, University of Rochester; secretary-treasurer: G. W. Green, California Inst. of Technology.

### National Association of College Stores

President: Helen Amber, Campus Store, Colgate University, Hamilton, N.Y.; general manager: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

### Association of College and University Housing Officers

President: William C. Wells, University of Maine; secretary-treasurer: Leonard A. Schaadt, University of Michigan. Convention: Aug. 3-6, Buffalo, N.Y.

### College and University Personnel Association

President: Diedrich K. Willers, Cornell University; secretary-treasurer: Shelton F. King, Carnegie Institute of Technology; executive secretary: Donald E. Dickason, University of Illinois, Permanent headquarters, 809 S. Wright St., Champaign, Ill.; Kathryn Hansen, editor, C.U.P.A. Journal. Convention: Aug. 3-6, Purdue University, West Lafayette, Ind.

### Associations of College and University Business Officers

#### American Association

President: William M. Jones, North Carolina College; secretary: S. V. Jeter, Clark College, Atlanta, Ga.

#### Central Association

President: Robert W. Hoefer, University of Cincinnati; secretary-treasurer: Ralph Olmsted, Evansville College, Evansville, Ind.

#### Eastern Association

President: Edward K. Cratsley, Swarthmore College; secretary-treasurer: Kurt M. Hertzfeld, University of Rochester.

#### Southern Association

President: G. C. Henricksen, Duke University; secretary: C. O. Emmerich, Emory University.

#### Western Association

President: Duncan I. McFadden, Stanford University; secretary: Robert B. Gilmore, California Institute of Technology.

### Canadian Association of University Business Officers

President: W. J. Condo, controller, University of Manitoba; secretary-treasurer: D. S. Claringbold, treasurer, Hart House, University of Toronto.

### National Association of Physical Plant Administrators of Universities and Colleges

President: M. F. Fifield, University of New Mexico; secretary-treasurer: J. D. McFarland, University of Arkansas.

### National Association of Educational Buyers

President: George W. Warren Jr., Baltimore Department of Education, Baltimore; executive secretary: Bert C. Ahrens, 1461 Franklin Ave., Garden City, N.Y. Convention: May 11-13, Fontainebleau Hotel, Miami Beach, Fla.

### Association of College Unions

President: J. Wayne Stark, A. & M. College of Texas; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

### American College Public Relations Association

President: James R. Jordan, State University of Iowa; executive secretary: W. Noel Johnston, 1785 Massachusetts Ave., Washington, D.C.



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...to simplify cleaning and meet rigid health standards for cleanliness.  
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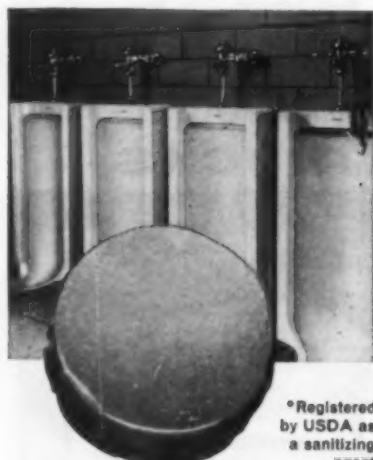
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Overall height 36"  
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bearing J & J casters  
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**Business Manager**—Experienced in all phases of business administration with responsibility for operation of large plant including farms, laundries, etc., purchasing, personnel, budget control and some finance; enrollment over one thousand students; age 39; family man, three boys; good, diversified business background. Write Box CW 388, COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager**—53 years old, excellent health; 25 years' experience business administration, purchasing, personnel, budget control, fund raising; experienced in college business office administration; family man, 12 year old son; diversified business background; available August 1st. Write Box CW 427, COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager—Plant Director**—12 years' successful experience as plant director, comptroller, president's assistant, business manager of ranking, private, coed, men's, and women's colleges; seeks major responsibility east of Mississippi; two children; available July-August. Write Box CW 425, COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager, Treasurer, Administrative Assistant**—College, university, education board, foundation, etc.; eight years' experience all phases business office administration, including auxiliaries, maintenance; former state board administrative assistant, systematizing, consultant, research auditing, etc.; colleges thereunder; manuals; presently Southern manager, 1300 enrollment; University Accounting Degree. Write Box CW 432, COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager, Treasurer, Controller**—Man; age 37; college graduate; trained and experienced in all phases of college financial and business management; presently associated with large metropolitan area university in a responsible position; desires position as business manager, treasurer, or controller with a college or university located in a smaller city or semi-rural area. Write Box CW 374, COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager, Treasurer, Controller, Administrator**—Man; age 43; B.B.A. and M.B.A. Degrees in Accounting; experience 20 years in all phases of financial, managerial accounting and business administration; desires position as business manager, treasurer, controller or administrator with progressive educational institution where opportunity also exists for part-time teaching and continued research toward Doctorate Degree; presently employed as controller for large industrial concern; resumé forwarded upon request. Write Box CW 426, COLLEGE AND UNIVERSITY BUSINESS.

**Food Service Director**—Male; able to produce high quality, economical food services, experienced in obtaining cooperation; state terms; northeast location preferred. Write Box CW 423, COLLEGE AND UNIVERSITY BUSINESS.

**Food Service Director**—Successful experience in developing university food service department during period of rapid growth and ex-

pansion of physical facilities; emphasis on quality food, student satisfaction, cost control, budgeting, good personnel practices, careful long range management. Write Box CW 420, COLLEGE AND UNIVERSITY BUSINESS.

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**Ground Superintendent or Horticulturist**—Broad knowledge of landscape and maintenance problems, greenhouse management and interior plantings; B.S. Degree. Write Box CW 385, COLLEGE AND UNIVERSITY BUSINESS.

**Superintendent, Buildings and Grounds**—Twelve years' experience small liberal arts college plus twenty years' experience in construction, maintenance, buying and planning; now employed; engineering training; member Physical Plant Administrators; desires southwest or West Coast location. Write Box CW 414, COLLEGE AND UNIVERSITY BUSINESS.

## POSITIONS OPEN

**Assistant Business Manager**—For well-endowed Midwestern liberal arts college, 1500 students; to supervise accounting department; handle endowment accounting; prepare reports; budget control and cost study in department of buildings and grounds, dormitories and bookstore; candidate should have several years' experience in small college; opportunity for advancement. Write Box CO 270, COLLEGE AND UNIVERSITY BUSINESS.

**Assistant Food Service Director**—For small union on West Coast; position offers opportunity for advancement; woman preferred; limited experience acceptable. Write Box CO 271, COLLEGE AND UNIVERSITY BUSINESS.

**Bookstore Manager**—Established liberal arts college for women in western New England; text, trade and paperback books, stationery, supplies, greeting cards and art supplies; experience in merchandising and general book trade desirable. Address qualifications to Box CO 257, COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager**—Private church related preparatory school for 250 girls; 20 acre campus; Southern California resort town; must be experienced accounting, purchasing, maintenance, personnel supervision; include education, age, experience, references, salary requirement in resumé. Write Box CO 272, COLLEGE AND UNIVERSITY BUSINESS.

## MISCELLANEOUS

**Merchandise Wanted**—Used Dorm furniture; large lots of same model from colleges, institutions, etc.; anywhere in U.S.A. AJAX FURNITURE OUTLET, INC., 9602 Ditmas Avenue, Brooklyn 36, New York.

The rates for classified advertisements are: 20 cents a word; minimum charge, \$4. (No charge for "key" number.)

Forms close 25th of month preceding date of issue.

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COLLEGE and UNIVERSITY BUSINESS



# WHAT'S NEW

July 1958

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 64. Circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

## Specially Developed Lamp for Residence Hall Use

Developed specifically for use in residence halls and dormitories, the new



Model No. 5861 table lamp provides the proper amount of light on a student's desk. The scientifically shaped glass diffusing bowl is designed to give the proper quality of light to help the student maintain a high degree of efficiency over long periods of time.

The lamp has a heavy cast-iron base for stability. The Polyplastex shade is virtually indestructible and can be washed with soap and water. The switch is conveniently located in the base which has a protective finish coating for lifetime use. The manufacturer states that the entire lamp has Underwriters Laboratories approval. Excel Mfg. Corp., S. Walnut at 20th, Muncie, Ind.

For more details circle #506 on mailing card.

## Folding Tablet Armchair Has Wrap Rack

The added convenience of a bar across the back of the No. 875TA tablet armchair gives a place for students, teachers or those



outside the classroom who may be using the school seating facilities, to hang sweaters or any wraps. The Wrap Rack also serves as a convenient handle for

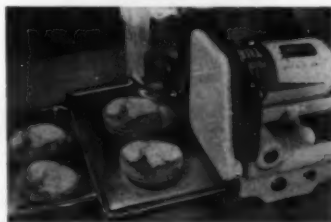
carrying the chair when folded.

The sturdy chair has a tubular steel frame with extra wide, contoured seat and back for comfort and correct posture. The large, hard-surfaced tablet arm gives ample space for writing materials or for food service when used in cafeterias. The tablet arm has a plywood base with Northern Maple back and high pressure laminate surface which is resistant to marring and scuffing. The arm folds flat for storage. Durham Mfg. Corp., Muncie, Ind.

For more details circle #507 on mailing card.

## Whole, Boned Turkey Is Pre-Cooked for Portion Serving

Light and dark meat are combined in the boneless roll of pure turkey meat offered in the new Armour Star Turkey Roll. The roll can be sliced to precise portion sizes for sandwiches, plate dinners, salads or casseroles. It speeds preparation



of turkey dishes while offering full portion and cost control.

Armour Star Turkey Roll consists of an eight to ten pound roll of 60 per cent white and 40 per cent dark meat completely sealed in a moisture-proof casing and hard frozen to protect quality and flavor until used. There is no shrinkage or waste, all natural meat juices are retained, and the Turkey Roll requires minimum storage space. Armour & Co., Poultry Dept., Chicago 9.

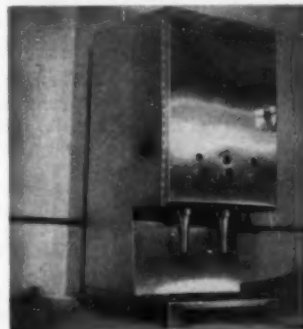
For more details circle #508 on mailing card.

## One Cup or Five Hundred With Prestobrew Coffee Server

Human error is eliminated in the preparation and serving of coffee with the new Prestobrew Coffee Server. No coffee is wasted and there are no grounds to handle. Coffee is made a cup at a time for freshness, yet the server can produce 500 cups in an hour at mealtime or a single cup during off hours. Costs are low and coffee quality is constant.

The completely automatic Prestobrew Coffee Maker brews the coffee within the machine. The exact amount of powdered coffee is automatically measured and the coffee brewed when the button is pressed.

The Prestobrew also has hot water available for tea and other uses. It is quickly cleaned, requires minimum maintenance, and is compact, occupying only 15 by 19

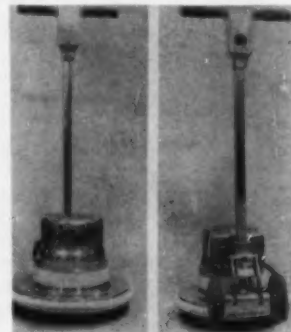


inches of space. General Coffee Co., 30 Rockefeller Plaza, New York 20.

For more details circle #509 on mailing card.

## Pullman Floor Machine Has Two Speeds

Scientific maintenance engineering with two-speed operation is featured in the new Pullman Floor Machine. Lo Speed on the new machine is 140 RPM for scrubbing floors and shampooing rugs as well as for use by inexperienced operators. Hi Speed is used for polishing and buffing floors and for the use of experienced operators. In addition, with Lo Speed detergents are kept under the brush, there is no splashing and non-skid waxes are brought to a lustrous sheen. Hi Speed gives superior burnishing action with higher gloss and longer wear. The Pullman 2-Speed Floor Machine is constructed for heavy duty use and employs modern technological ad-



vances in its engineering. It is streamlined in design, quiet in operation and is available in various sizes with a full line of accessories. Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass.

For more details circle #510 on mailing card.

## What's New . . .

### Adjustable Art Desk Doubles for Commercial Use

The new "Top-O-Matic" No. 400AD Art or Commercial Desk is a versatile unit



permitting use of the same room and furniture for both art and commercial classes. The desk top is set at the desired angle for art or mechanical drawing classes with a special "Top-O-Matic" button. For commercial class use, the same button lowers the desk top gently, quietly, safely and automatically. The special hydraulic restraining device prevents slamming. The top is of impervious Fibersin and the design gives maximum space for knees and legs. **Smith System Mfg. Co., 212 Ontario St., S.E., Minneapolis 14, Minn.**

For more details circle #511 on mailing card.

### SS-300 Sound System Is Economy Unit

Designed to bring the advantages of a complete communication system to every school, regardless of size or budget, the new Executone SS-300 is an economy school sound system. The compact desk-top unit illustrated initiates sound, public address and two-way intercom transmissions to any classroom, any combination of classrooms or to all classrooms. Time signals are also included in the system in conjunction with any standard single channel program clock. The amplifier may be used to provide sound reinforcement for auditorium and gymnasium programs and special programs from these locations may be broadcast throughout the building.

The compact control station has a capacity of up to 20 classroom stations. Larger capacity stations are also available.



Classroom stations in a wide range of models to meet varying needs may be equipped with red flashing lamps to protect privacy of the teacher and class. Stations may be surface-mounted on the walls of existing schools or recessed in the walls of new schools. The combination four-speed record changer and AM-FM tuner with self-contained amplifier and dual speaker system may be moved from room

to room for independent use. **Executone, Inc., 415 Lexington Ave., New York 17.**

For more details circle #512 on mailing card.

### Low Cost and High Fire Rating for Flush Hollow Metal Doors

A three-hour Class A fire rating, plus half the installed cost of earlier models, are features mentioned for the new Overly flush hollow metal doors. They feature a standard heavy duty mortise lock, permitting a lighter weight, less expensive door with the favorable characteristics of the heavier models. The doors are designed for use in firewalls or division walls, switch gear and transformer rooms, film and record storage rooms, boiler, heater and compressor rooms and for other hazardous areas. **Overly Mfg. Co., Greensburg, Pa.**

For more details circle #513 on mailing card.

### Type Q Radiation Easily Installed

The new Herman Nelson Type Q Finned Radiation and Enclosures are simple in design, easy to install and are exceptionally sturdy. Particularly adaptable to school buildings, the new radiation is designed and constructed to last the life of the



building. Attractive appearance is one feature of the new Type Q which has rounded corners, a minimum of seams, smooth front cover and is available in a wide selection of colors.

Seamless copper tubing and aluminum fins are used for the heating elements which can be used with any type of steam or hot water heating system, with either manual or automatic controls. A wide range of heating capacities is available. Installation is simplified since bolts extending through the support brackets also mount the back panel to the wall. Other elements simply snap into place. **American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky.**

For more details circle #514 on mailing card.

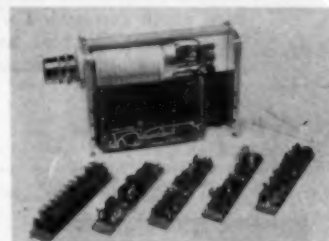
### Seven Dirt-Resistant Waxes Added to Multi-Clean Line

Seven new waxes which resist soiling because they are completely free from tacking are now available in the Multi-Clean line. Floors treated with the new waxes are said to require less frequent cleaning and when they do become soiled, the dirt is easily removed. The waxes are available in regular and anti-slip formulations and in Deep Glow Floor Wax which is a budget priced, water resistant product. **Multi-Clean Products, Inc., 2277 Ford Pkwy., St. Paul 1, Minn.**

For more details circle #515 on mailing card.

### Transistorized TV Camera Is Size of Book

A fully transistorized automatic television camera is now available from Dage Television Division of Thompson Products. Including all of the technical features of



broadcast equipment, the new miniature camera weighs approximately four pounds and is only 2 3/4 by 5 3/4 by 7 3/4 inches in size. The miniature size is possible since tubes are replaced with transistors and wires with printed circuits. The camera is self-contained, reducing the tangle of interconnecting electric lines to only one coaxial cable, thus simplifying operation and handling. All necessary auxiliary equipment is built into the miniature unit which will operate on almost any power supply.

The new camera has an electronic and automatic light level compensator. The coaxial cable may also be used to transmit current to the camera from a remote point, permitting remote operation. The modular construction facilitates and speeds maintenance of the new camera. **Dage Television Div., Thompson Products, Inc., Michigan City, Ind.**

For more details circle #516 on mailing card.

### Adjustable Positioning Relay Is Easily Installed

Accurate control of pneumatic motors and valves is assured with the new Sta-Put adjustable positioning relay recently introduced. The relay compensates for extraneous factors, thus assuring specified performance. The special feature of the new relay is the ease of installation. An ordinary screwdriver and a wrench are all that are needed to do the job. The relay



can also be used to tune up sluggish existing motors and valves or to adapt them to increased load conditions. The new model is small and attaches directly to the controlled motor or valve. **The Powers Regulator Co., 3434 Oakton St., Skokie, Ill.**

For more details circle #517 on mailing card.

(Continued on page 59)

## What's New . . .

### All-Purpose Dish Box for Heavy Duty Service

The new Marlex "miracle" plastic is used to form the Bloomfield all-purpose dish box for heavy duty food service. Rein-



forced at critical corner points, the new box is unaffected by detergents, greases and most alkalis and is non-toxic. It will not transfer food tastes or odors is corrosion-proof and will resist cracking, chipping, flaking and denting.

In addition to its use as a dish box, the new all-purpose unit can be used to store dry or moist food at temperatures ranging from 50 to 175 degrees F. Weighing only 33 ounces, the lightweight 16½ by 21½ by 5-inch box can support as much as 500 pounds. Full-finger grips and slide runners on the bottom make it easy to use. Bloomfield Industries, Inc., 4546 W. 47th St., Chicago 32.

For more details circle #518 on mailing card.

### Three Low Priced Duplicators With Quality Features

Three new duplicators recently introduced by Ditto are described as having

high quality features at low prices. They have modern styling, lower and wider than previous models, with quiet operation. Model D-30, hand operated, and Model D-31, electrically operated, give positive registration of master to copy paper through a knurled wheel in the drum, and copies automatically fall into



stacked alignment in the receiving tray. These models are equipped with liquid-control dials for maximum fluid economy, and both liquid and pressure levers are of the latch type for quick accurate positioning without slipping.

The machines have a top speed of two copies per second and can handle paper from 13 pounds to card stock without adjustment and any sized sheet from three by five to nine by fourteen inches. The third new model is the Ditto D-20, designed for budget buying, yet providing

(Continued on page 60)

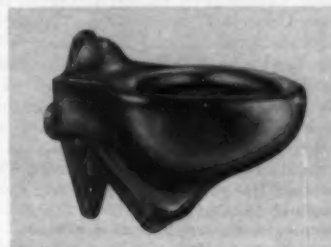
high quality copies. Ditto, Incorporated, 6800 McCormick Rd., Chicago 45.

For more details circle #519 on mailing card.

### Super Secur Plumbing Fixtures Made of Cast Aluminum

Cast aluminum is used to form the Super Secur Ware plumbing fixtures. The new wall-hung model illustrated facilitates toilet room and bathroom cleanliness since floors can be mopped wall to wall with no areas left to collect dirt.

Super Secur Ware plumbing fixtures are unbreakable and designed to withstand a great deal of punishment. They are crack-proof, tamperproof and practically impervious to heat and cold. They are available in polished cast aluminum or with a rugged,



non-chip Super Secureline-"S" coating in white or pastel colors. Aluminum Plumbing Fixtures Corp., 778 Burlway Rd., Burlingame, Calif.

For more details circle #520 on mailing card.

## Lamps\*

The UNIVERSITY LINE...

DESIGNED AND BUILT SPECIFICALLY FOR COLLEGE RESIDENCE HALLS



- ★ Study Lamps
- ★ Floor Lamps
- ★ Bed Lamps
- ★ Utility Lamps

All Completely U. L. Approved

\*Both Portable and as Fixtures

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**Excel**

MFG. CORP., MUNCIE, IND.

## POWERFUL NEW PLUNGER CLEARS CLOGGED TOILETS in a jiffy!



Clear messy, stuffed toilets Cut maintenance costs with

**TOILAFLEX**

Toilet **ALL ANGLE** Plunger

Ordinary plungers don't seat properly. They permit compressed air and water to splash back. Thus you not only have a mess, but you lose the very pressure you need to clear the obstruction.

With "TOILAFLEX", expressly designed for toilets, no air or water can escape. The full pressure plows through the clogging mass and swishes it down. Can't miss!

Get a "TOILAFLEX" for your home too. Positive insurance against stuffed toilet.

- Double-size cup, double-pressure
- Tapered tail gives air-tight fit
- Designed to flex at any angle
- Centers itself, can't skid around

**\$265**

Fully Guaranteed

Order from your Supplier of Hardware or Janitor Supplies

THE STEVENS-BURT CO., NEW BRUNSWICK, N. J.  
A Division of The Water Master Company



## What's New . . .

### Steam Cookers and Kettles in Combination

Four new Steam-Chef Super Generator Type Steam Cookers were recently intro-



duced. Operated by gas or electricity, the Super Generator steamers are available separately or as a combination unit with steam kettles, as illustrated. They are available in two, three and four-bushel sizes with stainless steel or aluminum kettles. The steam cookers are easily cleaned, attractive and designed to meet the most discriminating sanitation requirements. The Cleveland Range Co., 3333 Lakeside Ave., Cleveland 15, Ohio.

For more details circle #521 on mailing card.

### Stylon Ceramic Floor Tile in Large Squares

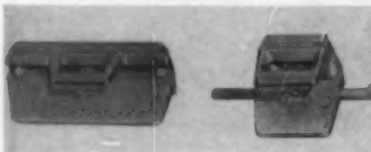
Stylon "Crystal-Glazed" ceramic floor tile is now available in large 12 by 12-inch tiles. The attractive, durable flooring is frostproof and can be used indoors or out, according to the report. It provides a permanent, wearproof flooring and is offered in fifteen colors. Stylon Corporation, Milford, Mass.

For more details circle #522 on mailing card.

### Apsco Punches Handle Heavy Paper

Up to 30 sheets of 16-pound bond paper can be punched at the same time with the new Apsco 220 and 330 punches. The Apsco 220 two-hole punch has a gauge for centering paper to be punched anywhere from five to fourteen inches. The new Apsco 330 three-hole punch has a gauge which pulls out at the side to center paper from three to eleven inches.

Made of chrome-hardened steel, the punches have exceptionally strong and efficient shearing action for punching large numbers of sheets at once. The



entire base is a chip container which is so constructed that it will not leak, no matter how full it becomes. The punches are designed to fit any desk drawer without locking the punch down. The base is heavily flocked to protect desk tops and is easily opened for cleaning. Apsco Products, Inc., 9855 W. Pico Blvd., Los Angeles 34, Calif.

For more details circle #523 on mailing card.

### Brulin Clearkote Is Light, Transparent Gym Finish

An unusually light colored, transparent finish for gymnasium floors is offered in the new Clearkote Gym Finish. A unique combination of tested synthetic resins, Clearkote does not discolor with age and has the approval of the Maple Flooring Manufacturers Association, according to the manufacturer. Because of its transparency, all the natural grain and beauty of the wood are visible when Clearkote is used. In addition to its use on gymnasium floors, Clearkote can also be used for refinishing desks and woodwork of limed oak or other blond woods as it does not darken them. Brulin & Co., Inc., 2939 Columbia Ave., Indianapolis 7, Ind.

For more details circle #524 on mailing card.

### Stereophonic Tape Recorder in Stacked Head Model

Model 758 L is a new addition to the line of Ampro Stereophonic Tape Recorders. It is available with or without built-in amplifier and will play either monaural or stereophonic tapes. The new model is de-



signed to give high-fidelity reproduction of tapes for music appreciation and other classes as well as for teaching. The second amplifier-speaker needed for operation can be provided through any radio or television with a phono jack. The additional built-in preamplifier, high-fidelity speakers and other features of the new model ensure superior reproduction. Graflex Inc., Dept. 103, Monroe Ave., Rochester, N.Y.

For more details circle #525 on mailing card.

### Garbage Disposer Line Is Redesigned for Versatility

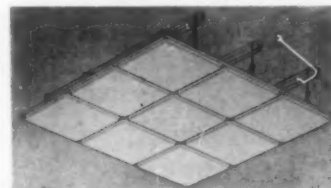
The versatile line of Waste King commercial garbage disposers and accessory components is redesigned for greater simplicity and efficiency of operation. Composed of six basic model disposers, the new line features a new silver guard and scrapping system, two bowls, three bowl covers, two swirl sprays, four overhead spray rinses, and a reduced number of switches, valves and other fittings.

The new components will be used to form 17 basic equipment groups designed to meet almost all institutional requirements for a dishtable or all-purpose disposer installation. The line has been under development for more than two years and includes quiet operation, long life, easier installation and maintenance and elimination of external wiring. Waste King Corp., 3300 E. 50th St., Los Angeles 58, Calif.

For more details circle #526 on mailing card.

### Wakefield Ceiling Permits Design Variants

In addition to efficient lighting, the new Wakefield Ceiling permits a variety of ceiling designs through the combination of standard components. Diffusers and



louvers varied as to style, pattern, texture, material and size are available for selection in planning the ceiling. Baffles are incorporated both as sound absorbers and as color accents. Color filters for the two by two-foot patterned diffusers come in standard pastel tints of pink, yellow and green where color accents are desired. Baffles may be painted to suit interior also. The new ceiling is designed for freedom of planning and ease of installation. The Wakefield Company, Vermilion, Ohio.

For more details circle #527 on mailing card.

### Desk and Chair Unit in Four Models

The MB 100 Series of combination desk and chair units in the Ludington Line of School Seating is now available in four models, two with lifting lid book boxes and two with open front book boxes. The MB 103LL and the MB 107LL have a lifting lid book box made from 20 gauge steel with reinforcing ribs stamped in the bottom and two clean-out holes. A heavy duty hinge and guide plates which slide silently and gently through two leathers form the lid lifting mechanism which gives controlled action. The book box has a pencil tray welded in the front section.

Seats and backs of the units are made from five-ply laminated maple plywood, steam formed, machine sanded and finished with two coats of clear lacquer. Fibersin is now available for desk tops on the new models. All steel parts on the desk are bonderized and finished with baked enamel except for the chrome plated adjustable leg inserts which have four positive height



adjustments. Enamel finishes are available in black, for interesting contrast in the classroom, as well as in colors. Ludington Seating Co., Ludington, Mich.

For more details circle #528 on mailing card.

(Continued on page 61)

## What's New . . .

### Year 'Round Unit for Room Air Conditioning

Available in cabinet or recessed models, vertical or horizontal, with combination cooling and heating coils, combination direct expansion and steam coils, and three



control kits, the new CR is a versatile year 'round room air conditioning unit. Summer cooling and winter heating are equally effective. Variety in choice of construction and type and manner of installation are features of the new unit. **Dunham-Bush, Inc., 179 South St., West Hartford 10, Conn.**

For more details circle #529 on mailing card.

### Activisible Record System Saves Time and Space

A new development in Acme Visible Record Files is the Activisible Record Pack. A pack of 25 record cards requires only a half-inch of filing space, yet when opened the cards lie flat in natural posting position for easy handling. When closed, the pack fits into the small space in trays, desk or

file drawers, tubs or rotaries, or can be carried in the pocket if required.

Activisible file units are removed with a single lifting motion which opens them to fully visible records. Each card is securely locked in place and cannot become lost or misfiled, yet a single card or a group of cards can be removed or attached in a matter of seconds. Cards are supplied with the hanger attached and roll smoothly through the typewriter for indexing. **Acme Visible Records, Inc., Crozet, Va.**

For more details circle #530 on mailing card.

### AC Presswitch Operates With Slight Touch

A slight pressure of the fingers or nudge of the elbow is sufficient to turn the new Presswitch on or off. The alternating current switch has a smoothly tapered nylon button in either Ivorine or brown finish. Particularly well adapted to fluorescent lighting installations in institutions, the new Presswitch simplifies light control. It is available in single pole, double pole, three-way and four-way and operates in any position. No special wiring is required as the switch fits all standard wall boxes and utilizes standard wall plates. **Harvey Hubbell, Inc., State St., Bridgeport, Conn.**

For more details circle #531 on mailing card.

### Port-A-Teria Is Mobile Food Service Unit

A mobile cafeteria designed to serve foods in areas which permit multi-purpose use is now available. The Port-A-Teria is

supplied in six-foot modular sections designed to receive accessories that convert it into a complete cafeteria counter capable of dispensing a variety of hot and cold foods and beverages. The system can be assembled to serve groups of 50 to 5000 easily and simply.

The Port-A-Teria is composed of the fully enclosed stainless steel Rigid-Therm insulated Stor-O-Wheel units and the open Tray-O-Pan files. Stor-O-Wheel units are independently mobile and roll into place under the Port-A-Teria to store and dispense dishes, trays, hot or cold foods and beverages. With the adjustable Tray-O-Pan files, the Port-A-Teria can be used as a preparation table in the kitchen. With Tray-O-Pan files attached, prepared food



is stored in pans or trays and filed under the table, and the fully loaded complete unit is rolled to the serving area to become part of the cafeteria line. The system operates on standard outlets and requires no waste or other mechanical connections. **Lincoln Mfg. Co., Inc., P.O. Box 2313, Fort Wayne, Ind.**

For more details circle #532 on mailing card.

(Continued on page 62)



## MONTHLY PAYMENT PLAN CUSHIONS RISING COSTS OF TUITION FOR PARENTS

Perhaps you plan to raise or already have raised your tuition and fees. You can minimize parent resistance to such increases and actually gain additional good will by offering The Tuition Plan. In line with modern budgeting habits, The Tuition Plan provides parents with a convenient monthly payment plan for paying out of income.

Several hundred colleges and schools are enjoying a fine experience with this added service. Besides achieving a fully-paid enrollment at the start of each term, they receive these direct benefits.

**COLLEGE HAS NO FINANCIAL LIABILITY . . .** on parent-signed contracts, colleges need not refund in event parent defaults on contract.

**A FOUR, THREE OR TWO YEAR PLAN . . .** now may be offered under one flexible contract.

**LIFE INSURANCE INCLUDED . . .** in event parent dies, life insurance takes care of total remaining costs covered by 4, 3 and 2 year contracts.

Operating at no expense to the college, the plan provides all forms, stationery and postage involved . . . cuts your overhead (administration, bookkeeping, clerical, credit and collection costs) in handling student accounts. The Tuition Plan can make important contributions in the areas of parent relations and cost controls. We invite you to write for further information about the plan.



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INCORPORATED

One Park Avenue, New York 16, New York

## What's New . . .

### Internal Filter Machine in Heavy Duty Vacuum Cleaners

The new 300 Series Heavy Duty Tornado Vacuum Cleaner is a quiet type internal



filter machine which can be used for wet or dry pickup. Increased air volume is supplied by a one h.p. motor and a new three-stage fan. The 300 can be used with 1½ or two-inch hose and has a top air speed of 375 m.p.h. The electric cable is detachable from the motor for convenience in storing and replacement. Two types of wheels are available, one of which permits moving the machine up or down stairs or over cables and hose without difficulty. **Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago 40.**

For more details circle #531 on mailing card.

### One-Hand Folding for BTC Contemporary Chair

Attractive contemporary styling and colors, one-hand folding or opening, and a carrying handle forming part of the frame are some of the features of the revolutionary new BTC folding chair. The result of two years of development by BTC product engineers and Robert Martin Engelbrecht, authority on modern institutional design, the new chair has the character and appearance of permanent seating with "X" type construction providing rigidity and strength. Construction and design are such that the chair can be picked up and opened or folded with one hand by grasping the handle which forms an integral part of the framework.

The new BTC chair is available with fully upholstered seat and back, birch or



walnut seat and back, or with perforated metal seat and back for indoor or outdoor use. All chairs are ruggedly constructed of oval steel tubing with non-marring replaceable molded feet and are available in a wide range of colors and materials. **The Brewer-Titchener Corp., Furniture and Equipment Div., Cortland, N.Y.**

For more details circle #534 on mailing card.

### Cushion-Eze Tackboard Has Foam Rubber Cushioning

Easy tack removal and insertion is possible with the new Cushion-Eze Tackboard material. Foam rubber cushioning and a patented synthetic rubber and fiber composition permit repeated use in one spot without damage to the tackboard. The material is lightweight, has sound absorptive qualities, is attractive in appearance and extremely flexible. It is easy to install without the possibility of cracking or breaking, even if folded double.

Cushion-Eze Tackboard is available in three modern pastel colors and is supplied in continuous rolls of 48 and 72-inch widths. It may be cemented to any solid wall or to a rigid backing as desired. **Armstrong Cork Co., Lancaster, Pa.**

For more details circle #535 on mailing card.

### Bottled Beverage Vendor Saves Space

The new QuiKold Model 65 "Space-Sav'r" Selective Vendor has a 66-bottle vending capacity and permits a choice of up to six different soft drinks. It has a two and one-half case pre-cooling capacity,



is readily portable and has a tamper-proof coin unit which accepts pennies, nickels and dimes. The manually-operated vending mechanism is dependable and trouble-free and the vendor is easy to load. **S & S Products, Inc., Dept. 58, P.O. Box 1047, Lima, Ohio.**

For more details circle #536 on mailing card.

### Air Flow Controller for Air Conditioning Systems

The R-316 Air Flow Controller is a simple new control device designed to increase the accuracy and reduce the cost of installing and operating high velocity, double duct type air conditioning systems. Each room is supplied with a constant volume of conditioned air with the new device. It is installed in the thermostatically-controlled high velocity units which mix hot and cold air in proper proportions to meet the requirements of each room. Constant volume air delivery is thus assured for each room, regardless of the number of mixing units in the system, the length of the duct or differences in pressure.

Flexibility and economy are combined in the R-316 since savings are effected in initial fan costs, fan h.p. consumption and duct design, as well as the problem of manual balancing of the system. **Johnson Service Co., Milwaukee 1, Wis.**

For more details circle #537 on mailing card.

### Built-In Booster Heaters for Jackson Dishwashers

Two new models of Jackson commercial dishwashers feature built-in booster heaters as an integral part of the machines. Requiring no additional floor space, the built-in boosters save on installation ex-



pense and convert 140 degree F. water to 180 degrees F. at maximum operation speeds.

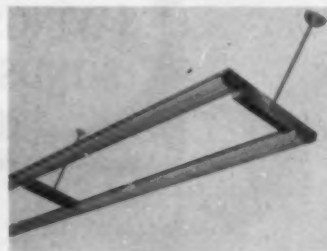
The Model 50 APR-B illustrated has a capacity of 1400 dishes per hour while the Model 10 A-B dishwasher washes, rinses and sanitizes 950 dishes or 1200 glasses at average operating speed. The stainless steel construction resists deterioration and the greatly increased wash jet pressure cuts soil from dishes at high speed. New, built-in vacuum breakers prevent back siphonage into water supply lines. **Jackson Products Co., 3703 E. 93rd St., Cleveland 5, Ohio.**

For more details circle #538 on mailing card.

### Fluorescent Visionaire Has Controlled Brightness

High intensity illumination with controlled brightness in the glare zones is incorporated into the new line of fluorescent Visionaire fixtures. The new fixtures utilize the Holophane clear acrylic Primalume panels, having a scientifically designed prismatic pattern which controls the light distribution. The result is more efficient lighting on the work plane with greatly reduced brightnesses from normal viewing angles.

The Visionaires are available as slim surface-mounted fixtures or recessed to fit completely flush with the ceiling. Heavy gauge stiffeners on the recessed box assure sturdy construction and safe installation.



The new fixtures are adaptable to many standard ceiling construction methods. All fixtures are Bonderite-treated for corrosion resistance and finished in all-white, baked enamel. **Sunbeam Lighting Co., 777 E. 14th Place, Los Angeles 21, Calif.**

For more details circle #539 on mailing card.

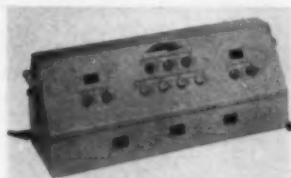
(Continued on page 63)



## What's New . . .

### Four-Station Power Supply Converts to Electrical Bench

Instant conversion of any shop workbench to an electrical bench is now possible with the new Crow 4-Station Student Power Supply. Model 620-R is a compact,



portable unit providing a practical, economical source for low voltage AC and DC power. It plugs into any standard 115 volt AC outlet and has six standard outlets conveniently located for motors, soldering irons and other equipment. It can be used by as many as eight students at a time, thus providing facilities where space is at a premium. The easily replaceable panel fuses give complete protection against overload. The unit is 26 by 10 inches in size, is easily carried in its attractive metal cabinet built to withstand hard usage, and requires minimum storage space. Universal Scientific Co., Inc., Vincennes, Ind.

For more details circle #540 on mailing card.

### Mobile Laboratory Tables for Portable Apparatus

Easy moving of portable laboratory apparatus can now be accomplished with the two new mobile tables introduced by Duralab. Apparatus weighing up to 200 pounds may be carried on the large working areas and electrical panel boards, when required, may be mounted in the cupboards. Moving apparatus within the laboratory and between laboratories is thus simplified.

The tables are available in two sizes, 27 by 24 inches and 49 by 24 inches, and may be purchased in several choices of cupboard and drawer combinations. Both are equipped with 3½-inch rubber tired, ball bearing steel disc wheels for ready mo-



bility. The colorlith tops simplify permanent installation of apparatus. Duralab Equipment Corp., Dept. D-2, 979 Linwood St., Brooklyn 8, N.Y.

For more details circle #541 on mailing card.

### Serving Carts for Hot Food Handling

Three new types of Thermotainer hot food service carts are now available. The

mobile food handling line is constructed of die-stamped heavy gauge stainless steel and is described as fully approved by the National Sanitation Foundation. Types HB3, HB4 and HB5 have Thermotainer hot food storage compartments below, each holding three flat pans and equipped with removable stainless steel slides. The open serving top of each unit has three, four or five steam table wells, each well controlled by a separate thermostat and individually insulated for serving heated food or for cold food storage. Franklin Products Co., 400 W. Madison St., Chicago 6.

For more details circle #542 on mailing card.

### Standard Teaching Microscope at Budget Price

A new series of teaching microscopes that closely approximate the professional laboratory microscope is now available at budget prices. The new B&L Series ST Standard Teaching Microscopes are designed to keep pace with the increased emphasis on science in the school curriculum. They are standard in size and in operation, developing correct habits for students using them. The separate coarse and fine adjustments essential to precise focus are incorporated into the ST series. The pre-focusing gage reduces damage to objectives and slides by pre-determining coarse focus.

A new fine adjustment with a slow tube travel facilitates fine adjustment on the new models and the new 43X objective provides fine image quality and distortion-free fields. The ST series is cased in heavy metal to withstand hard, daily use, and is built on a full-sized laboratory-type stand. The extended base prevents damage when the microscope is pushed against a vertical surface. Bausch & Lomb Optical Co., Rochester 2, N.Y.

For more details circle #543 on mailing card.

### Two Colorful Developments in Wall and Floor Tiles

A whole new range of beautiful effects can be achieved with the two new tiles introduced by American-Olean Tile Company. The new crystalline glazes were developed especially for use on floors, countertops and window sills. Scored Tiles with Crystalline Glazes are a new type of tile permitting unlimited design opportunities for floor and wall treatments with a rich appearance, yet with economical installation cost. They combine the flexibility of small unit design with the economy and easy installation of larger self-spacing units. Both tiles are available in 13 colors. American-Olean Tile Co., Lansdale, Pa.

For more details circle #544 on mailing card.

### "Gold Aluminum" Eagles Reduce Flag Weight

Aluminum eagles with gold finish are now used on Annin flags to reduce the weight of flags which may be carried by bands or R.O.T.C. in parades or special gatherings. Poles of aluminum are also used to reduce weight with the result that a five-inch wingspread aluminum eagle on an eight-foot by one-inch diameter screw-

jointed aluminum pole weighs only 32 ounces plus the weight of the three by five-foot rayon or nylon flag. Other sizes of flags, poles and eagles are relatively



light in weight compared with the heavy brass eagles and wood poles. New castings were made for the new aluminum eagles which have an attractive golden finish. Annin & Co., Fifth Ave. at 16th St., New York 3.

For more details circle #545 on mailing card.

### Super-Concentrated Detergent Offered in Liquid "K"

A top quality cleaner with stable suds is offered in Klenzade Liquid "K" Detergent Concentrate. It is easy on the hands and can be accurately dispensed with the Klenzade Jug Pump. The highly concentrated compound has high soil-holding capacity, requiring only small amounts in dilution for effective cleaning. It is equally effective in cleaning pots and pans and delicate painted surfaces. It is packed in control-size quarts, gallon jugs, five-gallon pails and 50-gallon barrels. Klenzade Products, Inc., Beloit, Wis.

For more details circle #546 on mailing card.

### Tumbling Belt Provides Safety With Comfort

The new Nissen Tumbling Belt can be used as a training or teaching aid in advanced tumbling tricks. It is constructed for maximum comfort and safety for the greatest number of potential users, through its unique design features. Quickly and easily adjusted to fit almost any individual, the new belt has waist size range from 20 to 40 inches. It consists of two sections of four-inch wide webbing which is pliable but rugged, joined in a metal connection. In actual usage the belt is a permanent one-piece unit. Anchor rings are double



stitched to the belting and the webbing, and the four-foot soft nylon ropes are attached to the swivels, preventing the possibility of rope burns. The new metal front-closure catch gives an absolute lock.

The belt can also be used in conjunction with the Nissen Overhead Trampoline Rig for advanced work and instruction on the Trampoline. Nissen Trampoline Co., Cedar Rapids, Iowa.

For more details circle #547 on mailing card.

(Continued on page 64)

## What's New . . .

### Literature and Services

• **Toplite**, a prefabricated functional roof-lighting panel, is the subject of a new booklet published by Kimble Glass Co., subsidiary of Owens-Illinois Glass Co., Toledo 1, Ohio. How Toplite panels, composed of scientifically designed prismatic glass units set in an aluminum grid frame using a weatherproof sealant, work with the sun for admitting light without heat, is described with words, pictures and charts.

For more details circle #548 on mailing card.

• The full line of **Bennett Waste Receptacles** is illustrated and described in a new catalog released by Bennett Mfg. Co., Inc., Alden, N.Y. The new lines of Bennett Drum Tops and Bennett Sanitary Napkin Wall Receptacles are included in the eight-page catalog which also covers self-closing waste receptacles, drop-in receptacles, paper towel dispensers, toilet tissue dispensers, mirrors and fluorescent fixtures, burn baskets and garbage can enclosures.

For more details circle #549 on mailing card.

• How **Couch Modular Fire Alarm Systems** protect life and property is discussed in **Bulletin 131** released by S. H. Couch Co., Inc., North Quincy 71, Mass. In addition to complete specifications and details on the system, the 25-page bulletin points out how the modular units facilitate expansion as the institution grows.

For more details circle #550 on mailing card.

• Colorful illustrations in a four-page folder show operation of the revolutionary **Ericofon**, the telephone with speaking and dialing units in one simple mechanism. Manufactured in Sweden and distributed in the United States by North Electric Company, 601 S. Market St., Galion, Ohio, the Ericofon is formed so that the one unit adapts perfectly to speaking and hearing, yet it stands on a desk or table when not in use and is brought into use merely by picking it up.

For more details circle #551 on mailing card.

• **Bulletin 611C**, dealing with water softening and conditioning equipment, is available from Elgin Softener Corp., 144 N. Grove Ave., Elgin, Ill. The 20-page booklet features automatic and manual zeolite water softeners as well as de-alkalizers which prevent corrosion of condensate lines and equipment, and de-ionizers that give the equivalent of distilled water at small cost.

For more details circle #552 on mailing card.

• **Pyrex Laboratory Glassware** is the subject of the 350-page **Catalog LG-1** issued by Corning Glass Works, Laboratory Glassware Sales Dept., Corning, N.Y. More than 9000 items are described in the volume, including approximately 475 new pieces of color-coded Pyrex brand laboratory glassware. The book is divided into six sections covering Pyrex brand labware, Vycor brand silica labware, Pyrex brand fritted ware, Pyrex brand low actinic ware, Corning brand ware and custom made apparatus.

For more details circle #553 on mailing card.

• **Structoglas "A"** reinforced plastic corrugated building panels and flat panes are described in an eight-page catalog released by the Structoglas Division of International Molded Plastics, Inc., 4387 W. 35th St., Cleveland 9, Ohio. Illustrations show the use of these panels in gymnasiums and swimming pools. Details of mechanical and physical properties, colors and finishes, as well as installation data are included in the booklet.

For more details circle #554 on mailing card.

• A cleaning and maintenance handbook is available without cost from Advance Floor Machine Co., 4100 Washington Ave. N., Minneapolis 12, Minn. Entitled "**How to Use Measured Work Techniques to Reduce Cleaning and Maintenance Costs**," the 28-page illustrated handbook was written by a methods engineering firm and tells how to reduce labor costs in cleaning and maintenance operations through the use of measured work studies. Subjects covered include job time requirements, time study, work loads, cleaning costs, work schedules, proper equipment and consideration of maintenance problems when planning new construction.

For more details circle #555 on mailing card.

• The Lighting Division of Garden City Plating & Mfg. Co., 2475 Elston Ave., Chicago 47, presents "**What to Look for in School Lighting**." The eight-page booklet gives a brief and non-technical outline of the essentials of good lighting as applied to classrooms and secondary areas in schools. How much light is needed, what makes for comfortable lighting, and the economics of lighting fixture selection are some of the subjects covered.

For more details circle #556 on mailing card.

• **Deluxe Steel Shelving** is the subject of **Catalog No. 30** released by Deluxe Metal Furniture Co., Warren, Pa. The 64-page booklet, designed to assist users in selecting the proper shelving for all requirements, gives detailed suggestions. Divided into five sections, the catalog covers Deluxe boltless steel storage shelving, shop items, Deluxe Verti-File open shelf filing equipment, Deluxe library shelving and wardrobe cabinets.

For more details circle #557 on mailing card.

• How **Davis lighting controls** and **Arielite Lighting** equipment give finger tip control of **Stage Lighting** featuring **The Davis Dimmer** is discussed in an eight-page catalog released by Ariel Davis Mfg. Co., 3687 S. State St., Salt Lake City, Utah. The various components of the Davis equipment are described and illustrated with a brief history of stage lighting and information on "the new concept in light control" featuring flexibility.

For more details circle #558 on mailing card.

• The operation of **Powermaster** packaged automatic boilers is the subject of a six-page **Bulletin #1241** issued by Orr & Sembower, Inc., Morgantown Road, Reading, Pa. Operating features of these completely self-contained, automatic units are described with ratings, dimensions, weights and other data.

For more details circle #559 on mailing card.

• "**The New Duo-Washfountains**" described as "the greatest advance in modern sanitary wash fixtures," are presented in **Bulletin K-1204** released by Bradley Washfountain Co., Milwaukee 1, Wis. Words and pictures are used to present the new features of the unit. These include easy wall mounting, floor clearance and the wide hinged foot-treadle for control of the water supply.

For more details circle #560 on mailing card.

• A pictorial brochure on the use of stone through the ages, from the time of the cave man to the present, is available from the Building Stone Institute, 420 Lexington Ave., New York 17. Entitled "**The Modern Stone Age Is Here**," the booklet pictures every type of quarried stone in natural colors. It is designed for use by administrators, architects and building committees.

For more details circle #561 on mailing card.

• A 16-page illustrated handbook, "**Specification Data for Soap Dispensing Equipment**," is released by Bobrick Dispensers, Inc., 1214 Nostrand Ave., Brooklyn 25, N.Y. Included are installation instructions and photographs of all types of basin and wall mounted dispensers and tank type gravity soap systems. The **Selectro Guide**, a cross-referenced index, is a feature of the handbook, which also lists services available from Bobrick's Architectural Design Service Department.

For more details circle #562 on mailing card.

• "**Specifications and Drawings of Stage Equipment and Components**" is the title of a 60-page book on the subject published by Hubert Mitchell Industries, Inc., Hartselle, Ala. Designed for business managers, architects and planning committees, the comprehensive book, with its companion catalog, **The Stage and its Problems**, provides ready reference covering every phase of stage design and equipment.

For more details circle #563 on mailing card.

• The new line of "**Klenzade Sanitation Brushes**" for use in food service is presented in a catalog published by Klenzade Products, Inc., Beloit, Wis. Information on the new line, which features new designs and materials new to the food service field, is presented. Each brush is designed for a particular cleaning task to save time and labor. They incorporate such materials as the new "sponge action" filled nylon material which holds increased amounts of cleaning solution, and the new "Bi-Nu" special composition block which is impervious to chipping, splitting and to cleaning chemicals and hot water. Brushes for vats and kettles, drain valves, pots and pans, small orifices and other food service needs are included in the new line.

For more details circle #564 on mailing card.

• The line of **A-F "Panhandler" pot, pan and utensil washers** is described and illustrated in a new four-page catalog released by the Alvey-Ferguson Co., Cincinnati 9, Ohio. Complete specifications and dimensional blueprints of the pass-through and single-door models are given with details of design features of each and layout diagrams for installation locations.

For more details circle #565 on mailing card.





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## INDEX TO ADVERTISEMENTS ON FOLLOWING PAGE



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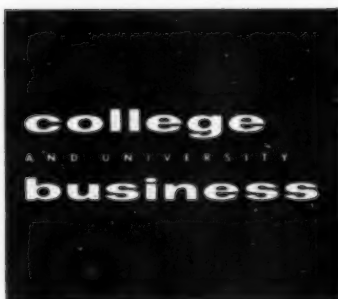
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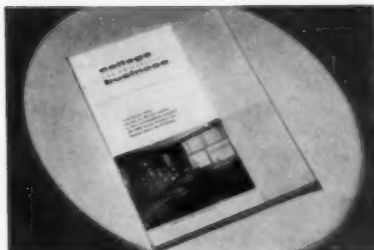
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